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**AN EXPLORATION OF ATTACHMENT, TRAUMA, AND TREATMENT
OUTCOME IN A COGNITIVE BEHAVIORAL THERAPY-BASED GROUP ANGER
MANAGEMENT PROGRAM: A MULTIPLE CASE STUDY**

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Presented to the Faculty of the Graduate School of
St. Mary's University in Partial Fulfillment
of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

In
Marriage and Family Therapy
by
Cynthia K. Swope, M.A.

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ABSTRACT

AN EXPLORATION OF ATTACHMENT, TRAUMA, AND TREATMENT OUTCOME IN A COGNITIVE BEHAVIORAL THERAPY-BASED GROUP ANGER MANAGEMENT PROGRAM: A MULTIPLE CASE STUDY

Cynthia K. Swope

St. Mary's University, 2016

Dissertation Adviser: Carolyn Y. Tubbs, Ph.D.

This study explored the relationship between trauma, attachment styles, and treatment outcomes among violent offenders attending a group cognitive behavioral therapy (CBT)-based anger management program. Using a mixed method, multiple case study design, the researcher examined the individual experiences of seven individuals court-mandated to attend a community-based anger management program. Semi-structured interviews were utilized to develop the participant narratives used in the qualitative analyses. Participant scores on the Adverse Childhood Experiences (ACE) Questionnaire, the Experience in Close Relationships (ECR-R) Questionnaire, and the Novaco Anger Scale (NAS) provided quantitative measures of trauma history, attachment style, and anger disposition. The results of the study indicated a predominance of insecure attachment and trauma among the participants, as well as non-clinical levels of anger disposition. The study findings suggest that psychometric screening for clinical levels of anger disposition, attachment style, and trauma history may improve the understanding and therefore the treatment of violent or aggressive behavior. The results also suggest that client

interviews focused on the context of the violent behavior, trauma, and family of origin can greatly inform the interpretation of psychometric measures, and lead to consideration of alternative and adjunct treatment interventions.

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CHAPTER I

THE PROBLEM AND JUSTIFICATION OF THE STUDY

Statement of the Problem

When assaultive and violent behavior comes to the attention of the criminal justice system, protection of the victims, and other members of the community becomes the responsibility of the courts. Because the assaultive and violent behavior leading to arrest correlates with anger dyscontrol, violent offenders remaining in the community, and under the supervision of the probation departments, are routinely court mandated to attend a community-based anger management program. Researchers have identified cognitive behavioral therapy (CBT) as the most commonly adopted evidence-based treatment model for anger management programs (Beck & Fernandez, 1998; Hollenhorst, 1998; Howells et al., 2005; Landenberger & Lipsey, 2005; Pearson, Lipton, Cleland, & Yee, 2002; Wilson, Bouffard, & Mackenzie, 2005). A primary goal of CBT for anger-prone individuals is to increase self-awareness and self-control over the automatic thoughts involved in the triggering of their anger state. However, a considerable number of researchers from the fields of neuroscience (Damasio, 1999; LeDoux, 1996; Niehoff, 1999; Schore, 2003; Siegel, 1999) and attachment (Babcock, Jacobson, Gottman, & Yerington, 2000; Carr, 2005; Dutton, 1999; Godbout, Dutton, Lussier, & Sabourin, 2009) have advanced the viewpoint that automatic brain processes associated with certain types of traumatic experiences can trigger anger in a subset of predisposed individuals. Once triggered, the cascade of neurological events related to defense mechanisms and intense physiological arousal associated with prior trauma, interfere with and short-circuit any attempts at rational

thought. Researchers have cautioned that this neurological flooding diminishes the effectiveness of CBT treatment alone (Walker & Bright, 2009b).

The scientific literature on the subject of interventions for individuals presenting with anger dysregulation issues is vast. However, the scientific studies exploring the efficacy of anger management interventions, especially when presented in a group format, are sparse and inconclusive (Laughlin & Warner, 2005). Research addressing the effectiveness of anger management programs for use with forensic populations is also fairly limited (Novaco, Ramm, & Black, 2001). Based on research flaws such as comparisons of diverse populations, diverse constructs, and the lack of standardized instruments, researchers have questioned the reported effectiveness of CBT in the treatment of dysregulated anger (Blacker, Watson, & Beech, 2008; Del Vecchio & O’Leary, 2004; DiGiuseppe & Tafrate, 2001; Howells et al., 2005; Walker & Bright, 2009a; Walker & Bright, 2009b). Researchers have also demonstrated that CBT has only a minimal impact on reducing recidivism among violent offenders (Babcock, Green, & Robie, 2004; Lawson, 2010) or has proven inconsistent in its impact on recidivism (Sartin, Hansen, & Huss, 2006).

Traditional CBT may be insufficient to interrupt the over-learned and automatic thoughts, feelings, and behaviors that occur with individuals who behave violently (DiGiuseppe & Tafrate, 2001; Walker & Bright, 2009a, 2009b). Researchers have proposed that intense and automatic emotional responses and their deeper emotional roots may be better addressed in more comprehensive and creative treatment programs (DiGiuseppe & Tafrate, 2001). Walker and Bright (2009b) explained that “designing a single treatment for violence would be like giving analgesia as the sole treatment for chest pain—it may be a suitable treatment for some, but ineffective or inappropriate for others” (p. 175). They proposed that, rather than a focus on

immediate triggers, the most effective treatment approaches must consider both the etiological and maintaining factors involved in poor emotion regulation.

Present Study

The relationship between unresolved trauma and violent behavior has emerged as a prominent perspective on both the etiology and maintenance of anger dysregulation (Dutton, 1999; Flemke, 2009; Menninger, 2007; Robins & Novaco, 1999; Van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Trauma experiences of varied durations (long-term vs. acute) and varying levels of subjective distress can all have equally injurious and long-lasting negative effects on physiological, psychological, and interpersonal functioning. Anger regulation deficits and problems with hyperarousal of the nervous system correlate to long-term exposure of witnessing or experiencing family violence (Dutton, 1999), as well as the acute trauma of experiencing relationship betrayal, unfaithfulness, and loss (Johnson, 2003; Atkinson, 2005). The common denominator in these trauma-producing events is the destruction of safety and trust among the most significant of human relationships—the caregivers and romantic partners depended on for comfort and protection. The translation of these relational traumas into the development of poor emotion regulation is perhaps best understood through the tenets of attachment theory.

Attachment theory offers a compelling perspective on the development of emotion regulation skills, as well as on the many entry points to the experience of trauma in the context of an attachment relationship during both childhood and adulthood. Relationship distress, also referred to as an attachment injury, extends to the development of either secure or insecure attachment style. Whereas a secure attachment style serves as a protective and resilience factor (Dankoski et al., 2006), it is thought that insecure attachment could lead to dysfunctional anger

and violence (Bowlby, 1988; Babcock et al., 2000; Kobak & Hazan, 1991; Mikulincer, 1998; Shaver & Mikulincer, 2007).

Neurological research provides support for the role of attachment theory in studies exploring the development of the neurological framework involved in emotion regulation and the pathways related to experiencing traumatic, interpersonal events that may lead to the development of anger dysregulation (Damasio, 1999; LeDoux, 1996; Siegel, 1999). The human drive towards attaching to another human being for safety, security, and protection appears to be a significant vulnerability for the formation of traumatic memories, and the development of maladaptive emotion regulation skills. A more comprehensive approach to emotion regulation deficits considers the potential for attachment injuries throughout the lifespan and the neurological pathways involved in the storing of trauma-related memories.

The purpose of the study is to explore the relationship between attachment style, trauma, and treatment outcome among violent offenders attending a group CBT-based anger management program. Given the research demonstrating the likelihood of trauma histories among the population of violent offenders (Ferguson, Boden, & Horwood, 2008; Hill & Nathan, 2008; Murrell, Christoff, & Henning, 2007; Widom & Maxfield, 2001), the opportunity exists to explore the utility of assessing for attachment style and trauma history in order to explore their relationship to the treatment effectiveness of a group CBT-based anger management intervention.

Research Questions

Guided by the extant literature suggesting that violent offenders are likely to have childhood experiences categorized as adverse or traumatic, and therefore, exhibit insecure attachment styles, a mixed-method, multiple case design explored trauma history and insecure

attachment as etiological factors in the development of violent behavior. Quantitative and qualitative data were collected from a population of violent offenders attending a group CBT-based anger management program. The study's goal was to answer the primary question, "How does context inform the relationship between attachment, trauma, and treatment outcome among violent offenders attending a group CBT-based anger management program?"

The primary research question guiding this mixed-method, multiple case study was, "How does context inform the relationship between attachment, trauma, and treatment outcome among violent offenders attending a group CBT-based anger management program?" To more fully address the primary research question and manage the analysis, the researcher divided the primary research question into four sub-questions:

1. Is there a relationship between attachment, trauma, and treatment outcome?
2. Do individuals with an insecure attachment style present with greater difficulty in anger disposition?
3. Do individuals with a history of trauma present with greater difficulty in anger disposition?
4. How does context inform the relationship between trauma, attachment, and treatment outcome?

Rationale for Study

Attachment theory promotes the more comprehensive therapeutic view that a fundamental problem faced by couples and families in distress may be attachment insecurity. Emotion regulation difficulties are highly correlated to individual histories of trauma, including attachment injuries occurring during childhood or adulthood. The likelihood of childhood

exposure to violence increases among violent individuals, and forensic populations in general. Therefore, the likelihood of an insecure attachment style also increases with this population. Insecure attachment styles seem to correlate with poor emotion regulation and greater proneness to destructive anger. Attachment theory, as well as current neurological findings, suggests that relational conflicts automatically trigger memory networks associated with earlier trauma events or attachment injuries. Emotional and physiological arousal from the past event re-emerges, activating his or her maladaptive behaviors, which may lead to violent behavior. Under this perspective, there is, therefore, a need to consider the role of trauma and attachment style in dysfunctional emotion regulation believed to be a precursor to violent behavior.

Additionally, there is a need to expand the literature addressing the etiology and maintenance of anger dysregulation among forensic populations from an attachment perspective. A study connecting the commonly adopted anger management approach of CBT with attachment and neurological research may serve to stimulate conversation among the courts and mental health providers engaged in the treatment and rehabilitation of violent offenders. A study exploring attachment as an etiological factor in emotion dysregulation may guide practitioners towards resolving the core issues involved in anger dyscontrol.

Significance for the Field of Marriage and Family Therapy

Anger is an emotion commonly observed and challenging to negotiate in the therapy room. Prominent voices in the field of couples' therapy have suggested the need for a therapeutic approach respectful of the emotional dimension of the brain (Atkinson, 2005), integrating findings from physiological research, and acknowledging the power of emotion (Johnson & Lebow, 2000). Wright (2004) suggested that current findings in neuroscience might enhance the understanding of human interaction and influence the practice of family therapy. The current

study may provide additional insights into the possible origins of disruptive and maladaptive anger responses, which often impede therapeutic progress.

The researcher utilized a multiple case study to elicit participant personal perspectives on their childhood experiences in their family of origin. The literature suggests that events early in life, particularly those experienced with strong emotion, can and do remain an influence on individual functioning throughout life. Through this exploration of familial and environmental factors present in the lives of individuals who have exhibited maladaptive and harmful behaviors, this multiple case study illustrates the usefulness in screening for such factors when working with individuals and families. An exploration of multiple perspectives, and multiple factors believed to influence the development of poor emotion regulation and maladaptive behavior, may assist providers in their approach to family and relational assessment and treatment interventions. Whether referred to as intergenerational transmission of violence (Murrell, Christoff, & Henning, 2007) or the cycle of violence (Widom & Maxfield, 2001), parents tend to bring to the rearing of their children the unresolved issues of their childhoods (Karr-Morse & Wiley, 1997). Mental health practitioners must attend to every opportunity to assist in breaking this cycle.

Overall, the study findings highlight the usefulness in assessing attachment style and trauma history when individuals present with problematic angered behavior. Assessment of client and partner attachment style can aid in making sense of relational patterns that keep individuals in constant conflict, and generate distress in families seeking therapy. Attachment theory can inform traditional behavioral models and interventions, and help explain why people behave the way they do in relationships (Davila, 2003). As demonstrated in the present study,

adult insecure attachment styles may reflect the current quality of the relationship, and serve as a screening measure for the risk of continued relational conflict.

The present study also provided evidence for the need to screen clients for trauma history. It demonstrated that some individuals fail to recognize adverse childhood experiences as traumatic events. Moreover, individuals may fail to make a connection between these traumatic experiences and their current behavior in their close relationships. Trauma screening may serve as an entry point for making sense of maladaptive behavior, and assist in treatment planning. It is likely that many behavioral issues seen in the therapy room have their roots in trauma, which the client has not fully identified or resolved.

Additionally, the study findings suggest that marriage and family therapists have much to offer in the treatment of violent offenders. Ultimately, treatment interventions for this population are aimed at breaking the cycle of violence in the families of this forensic population. Marriage and family therapists can be essential in expanding not only the assessment of the individual but also the assessment of the couple dyad and the family system. While anger management programs may be beneficial for individuals, couples therapy may be the greater need and provide the best outcome for all family members. Designing treatment interventions with a family systems perspective might also serve to engage better clients who present with non-clinical anger levels.

Study Limitations

While the study can contribute constructive findings pertaining to the evaluation, and treatment of individuals in an anger management program, it had several limitations. First, the small sample size did not provide adequate power to identify significant relationships among the variables of interest. However, the goal of the present study was conceptual generalization, and

the usual analytic technique of obtaining large numbers of participants and a small number of variables is irrelevant to the multi-case design (Yin, 2013). The small size and demographic makeup of the sample (100% male) also limit the ability to generalize the findings beyond the sample in this study. Second, the treatment outcome was limited to only a pre- and post-treatment assessment. A follow-up on the lasting effects of the treatment intervention and recidivism rates would be of interest to the courts. Also, a particular problem with this population is the possibility of social desirability. Factors influencing the psychometric scores, including motivation, honesty, and self-insight suggest that there are difficulties in assessing change through self-report measures. Self-awareness for this population is likely to be low, and fear of legal repercussions may keep them from honestly reporting. Although the researcher assured participants of the confidentiality of their responses, the lack of therapeutic alliance with the researcher may have had more impact on their honesty. The study's sample was composed of volunteer, or self-selected, participants, therefore, it is possible that these individuals differ from those in the anger management program who did not offer their participation. Finally, because of the small sample size, and the study design, conclusions regarding causality cannot be determined.

Definition of Terms

The following terms assist the reader in understanding the key concepts relevant to understanding the research:

Aggression. Human aggression is any behavior directed towards another individual with the proximate (immediate) intent to cause harm. In addition, the perpetrator must believe that the behavior will harm the target and that the target is motivated to avoid the behavior (Bushman & Anderson, 2001).

Anger. Anger is a normal emotion having functional or adaptive value. It is a negative emotional state that varies in intensity and duration and usually associated with emotional arousal and a perception of being wronged by another. Anger frequency, intensity, duration, and mode of expression constitute response parameters by which a person's anger reactions can be judged to reflect maladjustment or dysregulation (Forbes et al., 2004).

Anger management program. A treatment intervention designed to assist individuals with problems of anger and aggression. Reduction in anger arousal or regulation is a fundamental part of anger treatment (Novaco, 1980). Often, assaultive or violent behavior leading to an arrest correlates with anger dyscontrol. Therefore, anger management has earned face validity as a reasonable treatment alternative for domestic abusers, child abusers, animal abusers, substance abusers, aggressive juveniles, perpetrators of hate crimes or road rage, and other violent offenders (Hollenhorst, 1998).

Attachment theory. Attachment theory focuses on the bond that develops between the child and primary caregiver and the consequences this has for the child's emerging self-concept and developing a view of the social world. According to the originator of the theory, John Bowlby (1973, 1980, 1982), attachment theory has an evolutionary view in which infant attachment behaviors are controlled by a distinct, goal-directed behavioral system, which has a "set goal" of maintaining proximity to a nurturing adult and a biological function of promoting the child's security and survival (Collins & Read, 1990). The attachment system is active over the entire lifespan and manifests in thoughts and behaviors related to proximity seeking in times of need (Bowlby, 1988). The dynamics of close relationships in adulthood are understood in terms of the functioning of attachment systems (Hazan & Shaver, 1994).

Case-study design. A case study is an empirical inquiry that investigates a contemporary phenomenon (the case) in depth and within its real-world context. In other words, a case study is conducted when the researcher wants to understand a real-world case and assumes that such an understanding is likely to involve important contextual conditions pertinent to the case (Yin, 2014).

Emotion regulation. Emotion regulation is a term synonymous with affect regulation; it is characterized by the capacity to label affects, to contain emotional distress, and to respond behaviorally with adaptive emotional coping (Siegel, 1999).

Family violence. Events that fall in the realm of family violence can include physical or verbal aggression and involve at least one family member as a victim and another as a perpetrator (Margolin & Vickerman, 2011).

Internal working model. A central tenet of attachment theory is that mental representations of the self and others occur in the context of the child-caregiver relationship which influence how the individual perceives the world around them and how one expects persons to whom they might become attached to behave or respond. Bowlby (1988) hypothesized that internal working models operate primarily outside of conscious awareness and tend to remain stable over time.

Interpersonal violence. Interpersonal violence takes many forms based on the type of act (e.g., physical, sexual, psychological, deprivation, neglect) and the person (e.g., child, partner, elder, acquaintance, stranger) to whom the act is directed (Kazdin, 2011). For the purpose of this paper, the terms inter-partner violence and intimate partner violence will define the act of violence between romantic partners, and the term inter-parental violence will define the act of violence between two adults engaged in co-parenting.

Traumatic event. As defined by the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013), a traumatic event involves direct personal experience of an event that involves actual or threatened death, serious injury, or other threat to one's physical integrity; witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate (p. 463). A traumatic event as defined by Gil (2012) is any stressful event that overwhelms the individual's perceived abilities to cope.

Violence. Violence is a behavior (physical, sexual, or verbal) that tends to cause bodily harm or forcibly interfere with personal freedom (De Zulueta, 2001). Violence is aggression that has extreme harm as its goal (e.g., injury or death). All violence is aggression, but many instances of aggression are not violent (Anderson & Bushman, 2002).

Violent offender. Violent offender is a term that applies to a person under the supervision of the Department of Corrections or a Community Supervision and Correctional Department for the perpetration of a violent act (<http://tdcj.state.tx.us/definitions/definitions-home.htm>).

CHAPTER II

LITERATURE REVIEW

Anger, Aggression, and Violence

Researchers have demonstrated the association between anger and many negative consequences, including aggressive behavior (Berkowitz, 1990; Fives, Kong, Fuller, & DiGiuseppe, 2010), inter-partner violence (Barbour, Eckhardt, Davison, & Kassinove, 1998; Elkins, Moore, McNulty, Kivisto, & Handsel, 2013), parental violence (Kolko, 1996; Rodriguez, 2008), substance use disorders (Barrett, Mills, & Teesson, 2013; Nichols, Mahadeo, Bryant, & Botvin, 2008), and risk for substance use relapse (Reilly & Shopshire, 2000; Witkiewitz & Villarroel, 2009; Zywiak, Connors, Maisto, & Westerberg, 1996). However, the activation of anger does not always lead to maladaptive behavior, and not all anger is destructive and problematic. Anger is a natural, biologically necessary emotion innate to all human beings (Gardner & Moore, 2008). There is, therefore, need to distinguish between anger, aggression, and violence, and to explore their relationships.

Anger. Anger is a subjective and covert emotional experience (Norcross & Kobayashi, 1999). The human nervous system is hardwired for the experience of anger with a distinctive biological signature intended to serve an adaptive function. The basic purpose of anger is to prepare human beings to respond to real threats in the environment. With the affective state of anger, “blood flows to the hands, making it easier to grasp a weapon or strike at a foe; heart rate increases, and a rush of hormones such as adrenaline generates a pulse of energy strong enough for vigorous action” (Goleman, 2005, p. 6). The physiological state associated with the emotion

of anger motivates the individual to pay attention, recognize problems, and take corrective action.

Deffenbacher (2011) defined anger as an internal experience comprising emotional, physiological, and cognitive components that occur and rapidly interact with each other such that they often blend into a singular experience of anger. The rapid sequencing and convergence of these internal processes serves as a functional human survival mechanism when triggered by a real and threatening stimulus. However, anger becomes dysfunctional when it occurs with high levels of frequency, intensity, duration, and maladaptive modes of expression (Forbes et al., 2004). Gardner and Moore (2008) explained, “this otherwise normal emotion can lead to chronically heightened arousal and is associated with dysfunctional and problematic behavior” (p. 898). There is ample research supporting a strong correlation between anger arousal and violent behavior (Barbour, Eckhardt, Davison, & Kassonove, 1998; Berkowitz, 1990; Nomellini & Katz, 1983; Rodriguez, 2008).

Aggression. Aggression is any behavior directed towards another individual executed with the immediate attempt to cause harm. The perpetrator must believe that the behavior will harm the target and that the target is motivated to avoid the behavior (Anderson & Bushman, 2002). Aggression involves a variety of physical, verbal, and indirect behaviors (Fives, Kong, Fuller, & DiGiuseppe, 2011), and as a trait, aggressiveness is the disposition to display attacking, destructive, or hurtful actions (Smith, Glazer, Ruiz, & Gallo, 2004).

Violence. Anderson and Bushman (2002) defined violence as aggression that has extreme harm as its goal (e.g., injury or death). Violent acts may take the form of physical, sexual, or verbal behaviors. Researchers commonly use the terms violence and aggression synonymously (Berkowitz, 1990; Gardner & Moore, 2008; Murrell, Christoff, & Henning, 2007). However,

Anderson and Bushman made the differentiation that all violence is aggression, but many instances of aggression are not violent. They explained that, “a child pushing another [child] off a tricycle is an act of aggression, but is not an act of violence” (p. 29).

For the purpose of this paper, the terms aggression and violence are used synonymously and will be understood to describe any behavior - verbal or physical - that is threatening or harmful (physically or emotionally) or has the potential to threaten or harm another individual. Aggression and violence are the overt, harmful, and maladaptive behavioral manifestations of anger dyscontrol. Hypotheses regarding the goals behind these malevolent behaviors offer further explanations for the relationship between anger and violence.

Anger as a Precursor to Aggression and Violence

Researchers have well established the relationship between anger and violent behavior. Why this normal emotion influences some individuals to act out in harmful ways, while others do not, remains a complex issue. Following the cognitive behavioral model of anger-related aggression, faulty information processing occurs during an aversive encounter, which is due to cognitions most likely related to unrealistic demands, expectations, or assumptions about the behavior of others (Gardner & Moore, 2008). This cognitive process leads to physiological arousal (heightened anger), which predisposes the individual to engage in socially learned aggressive or violent behavior that serves to discharge the anger. From a systemic perspective, Robins and Novaco (1999) pointed out that the emotional systems begin to move away from equilibrium during anger arousal. The built-in tendency to counteract this state, a negative feedback loop, activates the learned, direct expression of aggression, which in turn lowers the arousal state (p. 330). The immediate personal outcome, such as getting what one wants

(Gardner & Moore, 2008), and the reduction of arousal (Robins & Novaco, 1999) serves to reinforce the process.

Berkowitz (1990) pointed out that these conventional approaches to anger-linked violence and aggression have focused on the perpetrators' conscious and rationalistic intentions, as well as the perpetrators' failure to consciously restrain from harmful actions. In both instances, violent offenses result from a decision process, as faulty as it may be, that involves "controlled information processing, in which the intentions and efforts of the perpetrator are believed to be governed by their knowledge base, concepts, and expectations" (p. 117). As an alternative view, Berkowitz contended that violence is often a relatively thoughtless or impulsive reaction in which automatically activated mental associations related to the experience of negative affect completely bypass the decision-making processes involved in controlled information processing. Similarly, Gardner and Moore (2008) suggested violent behavior serves the purpose of avoiding the negative affect state of anger. They proposed a theoretical model in which anger-prone individuals experience a sense of uncontrollability and vulnerability and choose a fight, as opposed to flight, response based on biological factors (physiological arousal), early learning histories, and modeling experiences (p. 903).

Anger Management Programs

The role of anger as an antecedent to aggression and violence is complex, but its association with these maladaptive behaviors is clear. Researchers demonstrating such associations have presented strong support for the inclusion of interventions targeting poor anger control in the treatment of individuals struggling with these problematic behaviors. Community-based anger management programs are a popular solution to this societal need for anger reduction interventions. Individuals with anger problems may volunteer to attend, or they may

attend as part of agreements for continued probation, school attendance, or employment (Deffenbacher, 2004). Practitioners use anger management programs with a variety of populations, including drug users, emotionally disturbed adolescents, parenting groups, posttraumatic stress disorder sufferers, and forensic populations (Naeem, Clarke, & Kingdon, 2009). Despite the popularity of anger management classes, research devoted to program evaluation is sparse and inconclusive (Laughlin & Warner, 2005), and outcome research on anger reduction appears to lag behind that on other emotional problems, such as anxiety and depression (Deffenbacher, Oetting, & DiGiuseppe, 2002). The popularity, extensive application, and the potential impact of community-based anger management programs, warrants a closer examination of the theories and guidelines supporting this treatment approach.

The Cognitive-Behavioral Approach to Anger Management

A review of the literature addressing the current state and treatment effectiveness of anger management programs clearly identifies cognitive-behavioral therapy (CBT) as the leading evidence-based, and most commonly adopted, treatment model (Beck & Fernandez, 1998; Hollenhorst, 1998; Howells et al., 2005; Landenberger & Lipsey, 2005; Pearson et al., 2002; Wilson et al., 2005). CBT is a group of treatment procedures aimed at identifying and modifying problematic and faulty thought processes, attitudes, attributions, and problem behaviors (Durand & Barlow, 2000). Integrating social learning theory and information processing theory, CBT assumes that an individual's cognitions or thought processes profoundly affect their behavior choices. A strictly behavioral view assumes all behavior is learned from one's environment, whereas a cognitive approach emphasizes the role of an individual's automatic thought processes (information processing) leading to their interpretation of events and subsequent choice of action.

History of CBT. The cognitive-behavioral model has its origin in the theories developed by Aaron T. Beck during the 1950's (Beck, Rush, Shaw, & Emery, 1979), and Albert Ellis during the 1960's (Ellis, 1977). The CBT model proposes that distorted or dysfunctional thinking underlies all psychological disorders (Ledley, Marx, & Heimberg, 2005). Cognition is central to anger because there is no direct relationship between external events and anger. The experience of anger is a function of one's perceptions, and subsequent cognitive processing. Cognitive appraisal is a highly automatic process that is "influenced by the expectations or cognitive priming established by a network of personal memories and meanings" (Novaco, 2003, p. 15). Treatment from a cognitive model places emphasis on guiding individuals to greater self-awareness of and self-control over the automatic thoughts involved in triggering their anger state.

Contemporary behavior theory stems from the learning theories proposed by John B. Watson's classical conditioning, B. F. Skinner's operant conditioning, and Albert Bandura's social learning theory (Corey, 2001). Each of these theories shares the fundamental belief that all behavior is learned behavior. Learning theory suggests that a child learns how to commit violence by witnessing destructive conflict resolution and communication patterns among family members. The intergenerational transmission of family aggression involves both the acceptance of aggression within families and the particular types of aggression displayed in the family of origin (Murrell, Christoff, & Henning, 2007). Behavioral-based treatment focuses on identifying unhealthy, destructive behaviors and learning healthy, constructive skills for conflict resolution.

Assumptions of CBT. Anger management programs that fall under the umbrella of CBT perceive dysfunctional anger responses as a result of faulty information processing and consequent negative emotional states, which lead to the acting out of learned maladaptive behaviors. CBT clinical interventions focus on educating and helping individuals become aware

of the precursors to anger, such as thought processes and physiological arousal, and to change and control these processes through the adoption of healthy and positive coping skills. From this perspective, violence is a learned response; therefore, it can be unlearned.

Community-based CBT treatment programs have similarly structured goals. Educational materials focus on guiding clients to an increased awareness of the underlying thought processes that commonly lead to provocation and emotional arousal. Once an individual is aware of the underlying and most often automatic thought processes, they can begin to challenge and transform them into healthier and more adaptive thought patterns. Gaining greater understanding and control of one's thought process results in greater anger control and, most importantly, greater emotion regulation. The goal of self-control or self-regulation includes understanding and controlling the emotional feelings of anger, the physiological arousal associated with anger, and the resulting angry behavior (Hollenhorst, 1998). Program objectives commonly include an emphasis on arousal awareness and control, paying attention to and restructuring thoughts (realistic appraisal of the situation), problem-solving (alternative responses), communication skills (active listening), assertiveness training, and behavioral skills for arousal reduction (relaxation exercises, positive imagery).

Evaluating the effectiveness of CBT. A number of researchers have performed meta-analytic reviews of both published and unpublished studies evaluating their effectiveness (Beck & Fernandez, 1998; Del Vecchio & O'Leary, 2004; Edmondson & Conger, 1996). Although the meta-analytic reviews differ in their selection of included studies, their reported results offer strong support for CBT as an effective intervention for anger disorders. Beck & Fernandez (1998) suggested that CBT satisfies the managed health care demands for time-limited interventions.

Beck and Fernandez (1998) evaluated the overall effectiveness of CBT in the treatment of anger dysregulation through a meta-analysis of published and unpublished studies with clinical populations reported to include prison inmates, abusive parents, abusive spouses, juvenile delinquents, adolescents in residential treatment, children with aggressive classroom behavior, mentally handicapped clients, and college students. Researchers obtained 50 effect sizes from 50 studies and found an effect size of 0.70. The conversion of this measure into a percentile allowed the researchers to determine that the average subject in the CBT treatment condition fared better than 76% of those not receiving CBT. Beck and Fernandez (1998) reported that these results were congruent with other meta-analyses exploring the effectiveness of CBT in the treatment of other affective disturbances, such as anxiety and depression.

Del Vecchio and O'Leary (2004) analyzed the overall effects of anger treatments, as well as the effects of anger treatment on various aspects of anger (e.g., driving anger, anger expression, anger suppression). The researchers limited inclusion by considering only those utilizing non-institutionalized adults with demonstrable anger as determined by standardized measures such as the Novaco Anger Scale ([NAS], Novaco, 2003) and the State-Trait Anger Expression Inventory ([STAXI], Spielberger, 1996). They found that each treatment approach under review (cognitive-behavioral therapy—CBT, cognitive therapy—CT, relaxation therapy—RT) produced medium to large effect sizes (0.61 to 0.90). CBT was the most effective treatment for anger control problems and anger expression problems (e.g., anger outbursts), suggesting that both cognitive and physiological aspects of anger are important to address during treatment.

Edmondson and Conger (1996) reviewed the relationship between assessment methods and treatment outcomes for anger problems treated in either a group or individual setting. Their meta-analysis revealed that the studies utilized a variety of anger measures and assessed varying

dimensions of anger (e.g., anger experience, anger behavior, anger physiology). Assessment methods included in their review were both self-reported and observed measures, such as physiological measures (galvanic skin response (GSR), heart rate, and blood pressure), anger and emotion rating scales, as and behavioral measures observed during role-plays.

Results obtained by Edmondson and Conger (1996) revealed medium to large effect sizes ranging from 0.64 to 0.80 for the treatments using cognitive, cognitive-relaxation, social skills, and relaxation therapies. Relaxation therapy elicited the most change in anger experience, followed by cognitive-relaxation, cognitive, and social skills treatments. The researchers found relaxation, cognitive-relaxation, and social skills treatments to have larger effects on self-reported anger behaviors than the cognitive treatment. All treatment approaches had a large to moderate effect size in the reduction of physiological arousal related to anger.

CBT group format for anger management programs. Despite the paucity of scientific studies on the efficacy of group CBT programs for use with violent offenders, controlled outcome research has demonstrated that CBT-based anger management programs are generally effective and better than no intervention (Deffenbacher, 2004). In a quasi-experimental two-sample pre and post non-equivalent group design, Ireland (2004) assessed the effectiveness of a brief group CBT-based anger management program for young male offenders. Compared to the control group, which received no treatment while on a waiting list, 92% of prisoners in the experimental group showed significant improvement on at least one of the two measures: the Wing Behaviour Checklist and the Anger Management Assessment. Naeem, Clarke, and Kingdon (2009) evaluated the effectiveness of a CBT-based program among a clinical population in a randomized controlled trial. The CBT group showed significant improvement compared with the control group on the anger measures of the NAS and the STAXI. Participants

in the control group received no treatment while on a waiting list. Because both studies utilized the no-treatment control group for comparison, it is difficult to say that a change in anger was due only to the CBT intervention or some other factor, such as meeting regularly with group members (Naeem, Clarke, & Kingdon, 2009).

Limitations of CBT. With the number of positive treatment outcomes reported, the popularity of a traditional CBT approach to treating anger dysregulation is understandable. However, numerous researchers (Blacker et al., 2008; Del Vecchio & O’Leary, 2004; DiGiuseppe & Tafrate, 2001; Howells et al., 2005; Walker & Bright, 2009a, 2009b) have conducted closer examinations of such studies in which they have identified limitations in the reported findings. These limitations have led to skepticism about the reported effectiveness of CBT, as well as the general application of CBT for anger disorders without regard for the defining characteristics of a specific population.

Diversity of constructs. A significant limitation identified in the meta-analytic reviews is the diversity of anger constructs (Del Vecchio & O’Leary, 2004). They point out that researchers (Beck & Fernandez, 1998; Edmondson & Conger, 1996) have included studies with measures of assertiveness, hostility, and aggression as measures of the anger construct. A comparison of outcome studies utilizing various constructs of anger is problematic because the effect sizes obtained are not clear indicators of change in anger alone. Del Vecchio and O’Leary (2004) suggested that, although the anger construct shares properties with hostility and aggression, the terms are not synonymous. They explained that referring to anger as the emotion, hostility as the attitude, and aggression as the behavior provides the best distinction between these three concepts. Del Vecchio and O’Leary (2004) described anger as “a negative emotional state that

varies in intensity and duration and usually is associated with emotional arousal and a perception of being wronged by another” (p. 15).

Lack of standardized assessment instruments. DiGiuseppe and Tafrate (2001) stated that not only is there a lack of treatment outcome studies focusing on anger as a clinical problem, but there is a problematic lack of standardized assessment instruments used in the outcome studies to date. They point out that the anger outcome studies measure change on a variety of dependent measures, such as self-reports of anger, physiological measures, and self- and significant other’s ratings of aggressive behavior. Del Vecchio and O’Leary (2004) noted that a weakness in previous meta-analytic reviews was the failure to limit their scope to samples that met specific criteria for anger. They suggested that reviews should limit inclusion to studies demonstrating clinically significant pre-treatment levels of anger as evidenced by scores on standardized anger measures. Additionally, they proposed that research on reported effect sizes should limit inclusion to studies utilizing standardized anger measures, as opposed to hostility or aggression scales.

Diversity of study populations. Researchers have identified the diversity in the study populations included in the meta-analytic reviews has been identified as yet another limitation to the existing research (Blacker et al., 2008; Del Vecchio & O’Leary, 2004; DiGiuseppe & Tafrate, 2001; Howells et al., 2005). The majority of studies included in meta-analyses focused on less serious populations with anger problems and are likely to differ substantially from forensic populations (Blacker et al., 2008). Howells et al. (2005) noted that forensic populations form only a small portion of the clinical populations represented in the outcome studies (Del Vecchio & O’Leary, 2004). Researchers have suggested that individuals who have come to the attention of the criminal justice system are likely to differ in variables that have contributed to the onset

and maintenance of their aggressive or violent behavior. The meta-analytic reviews have included highly diverse populations, such as children, inmates, inpatients, and child-abusing parents (Del Vecchio & O’Leary, 2004). DiGiuseppe and Tafrate (2001) noted that the majority of anger-outcome studies used volunteer participants, whereas most practitioners treat angry clients whom courts, employers, or loved ones have coerced into treatment.

Limitations of the CBT group format. Deffenbacher (2004) suggested that most anger intervention programs in the community have not been adequately evaluated. Although researchers have demonstrated the CBT-based group format to be effective in the reduction of anger, the research is sparse, especially for studies focusing on forensic populations. Despite the flaws in the research reporting CBT effectiveness as mentioned above, group CBT remains the most popular model for use in community anger management programs. Walker and Bright (2009b) pointed out that anger management is one of the few cognitive behavioral interventions with published studies showing no treatment benefit (Sharry & Owens, 2000; Watt & Howells, 1999), and they speculated that its ineffectiveness may be due to the group format.

Dysfunctional anger and violent behavior differ in the forms of expression, the context of anger, and the consequences of anger. Client characteristics and needs are also likely to differ and require assessment and treatment in a program designed to meet their specific goals. When aggression and violence reflect a sense of vulnerability, low self-worth, or weakness, it is unlikely that participants will find the group format a safe place to discuss and work on these issues (Walker & Bright, 2009b). Deffenbacher (2004) added that anger management programs are not a “one-size-fits-all” intervention.

Researchers working with violent offenders in clinical settings have suggested that traditional CBT may be insufficient to interrupt the over-learned and automatic thoughts,

feelings, and behaviors that occur with individuals who behave violently (DiGiuseppe & Tafrate, 2001; Walker & Bright, 2009a, 2009b). These researchers emphasize the need to focus on the deeper emotional roots of violent behavior not explored in traditional anger management approaches. Walker and Bright (2009b) advanced the opinion that violent individuals “may already realize that it is better not to fight, but struggle with the difficulty of change and giving up a habitual thinking and behavior style which meets some of their needs” (p. 177). Perpetrators have described the intense emotional state associated with family and inter-partner violence as uncontrollable, seemingly coming from nowhere. It is precisely this intense and automatic emotional response and its deeper emotional roots that may be better addressed in more comprehensive and creative treatment programs (DiGiuseppe & Tafrate, 2001). Walker and Bright (2009b) explained that “designing a single treatment for violence would be like giving analgesia as the sole treatment for chest pain—it may be a suitable treatment for some, but ineffective or inappropriate for others” (p. 175). They proposed that, rather than focus on immediate triggers, the most effective treatment approaches must consider both the etiological and maintaining factors involved in poor anger regulation.

The Human Experience of Emotion and its Regulation

Anger is among the six so-called primary emotions: happiness, sadness, fear, anger, surprise, and disgust (Damasio, 1999). Goleman (2006) explained that “all emotions are, in essence, impulses to act, the instant plans for handling life that evolution has instilled in us...each emotion plays a unique role, as revealed by their distinctive biological signatures” (p. 6). The impulses to act in certain ways (and not in others) correlate with automatic and unconscious physiological changes that lead to behavioral responses. The automatic physiological changes associated with anger can make it an especially difficult emotion to

regulate. Advances in neuroscience over the past few decades have provided a clearer understanding of how the brain's emotion centers move an individual to acts of rage and violence.

LeDoux's (1996) exploration of both animal and human fear conditioning revealed the amygdala's central role in the experience of emotion and defense against danger. He explained that detection of and defense against danger are not the only functions of the amygdala, but they are important ones that "[seem] to have been established eons ago, probably at least since dinosaurs ruled the earth" (p. 174). Mapping the neural pathways involved in the conditioning of a fear response, LeDoux discovered a pathway that could transmit information about incoming stimuli directly to the amygdala from the thalamus. This direct route completely bypasses the cortical brain areas involved in decision-making and appraisal.

The thalamus is the brain's information sensor and gatekeeper. It acts as a relay station, receiving information from all of the sensory organs (Drubach, 2000). LeDoux (1996) found that the fear reaction system could explain this direct pathway for information from the thalamus to the amygdala. A fear response involves the parallel transmission of incoming information to the amygdala and the sensory cortex of the brain. Whereas filtering information through the sensory cortex allows a reappraisal of the stimuli and consideration of appropriate responses, information coming directly from the sensory thalamus is crude, unfiltered, and biased towards evoking protective responses. The responses triggered by the amygdala are automatic and occur outside of conscious awareness.

LeDoux (1996) illustrated the automatic physiological responses triggered by the amygdala when an individual walking in the woods hears a crackling sound that could either be the snapping of a twig or the shaking tail of a rattlesnake. Before the cortex has figured out

whether it is a snake or snake-shaped twig, the amygdala has already started to defend against the snake. Through its neural connections to the autonomic nervous system, the amygdala has stimulated a cascade of physiological responses. The individual will probably have frozen in place in preparation for defense, with an increase in blood pressure and heart rate, sweating of the palms and feet, and the flow of stress hormones into the bloodstream. LeDoux (1996) referred to this automatic physiological reaction as “evolution’s gift” to humans, because when a snake is truly present this automatic response could save an individual’s life (p. 176). The amygdala serves as the storehouse of emotional memory and, with its privileged position in the neural architecture, it can hijack the brain to engage in automatic behavioral responses (Goleman, 2006).

LeDoux (1996) explained that when an individual is “in the throes of emotion, something important is occurring (stimuli), perhaps life threatening, and much of the brain’s resources are brought to bear on the problem” (p. 300). It is an unconscious defense system, with extremely limited access to conscious thought processes, such as reappraisal of the triggering stimuli. This unconscious defense process favors automatic information processing biases, such as misappraisal of environmental events, automatic negative thoughts, dysfunctional assumptions, and the triggering of negative core beliefs and schemas (Walker & Bright, 2009a). The human ability to utilize skills, strategies, and behaviors to modulate or inhibit these automatic processes is emotion regulation. Schore (2003) suggested, “the phenomena of self-regulation represents a potential convergence point of psychology and neuroscience” (p. 5).

Just as fear responses are triggered, benign stimuli in the environment can automatically trigger the implicit memory of negative (as well as positive) emotional experiences. Traumatic experiences, whether from childhood or adulthood, have the potential to be triggered and re-

experienced in the full emotional valence of the original event. The same brain-based processes involved in the fear response will begin to orchestrate the physiological responses (emotional) associated with the trauma. Again, conscious awareness of the process is not required, which may explain why any stimulus that in any way resembles stimuli from the traumatic event (e.g., loud noise, odors, tone of voice) may trigger arousal of negative affect.

Potegal (2012) provided further support for the bypassing of cortical areas during activation of the defense system. He explained that the frontal cortex of the brain is involved in the executive functions of social judgment and prediction, and it inhibits and controls anger and aggression. In his examination of the brain systems involved in the escalation of anger and aggression, he noted research findings (Spoont, Kuskowski, & Pardo, 2010) demonstrating that during a task of self-induced anger by recall of a provoking incident in their past, adult individuals with a history of violence do not show the activation of frontal lobe that nonviolent control subjects do. The findings suggest that violent individuals failed to engage in frontal inhibitory systems when provoked. In support of LeDoux's findings, the researchers found that violent individuals were found to exhibit relatively greater activations in the amygdala, suggesting the triggering of an affective response similar to the affective response experienced at the time the past incident occurred and the activation of potential response systems (Spoont, Kuskowski, & Pardo, 2010).

An individual's available repertoire of behavioral responses to the experience of negative affect, both adaptive and maladaptive, are deeply ingrained and experience dependent. According to attachment theory, an influential and well-researched human development model, early development of behavioral responses and the brain systems supporting them are significantly influenced by the relationship between the child and primary caregiver. Because the

acquisition of adaptive emotion regulation skills, or affect regulation, is a critical achievement of early childhood (Damasio, 1999; LeDoux, 1996; Siegel, 1999), attachment theory and research highlight the link between attachment and affect regulation. Attachment theory offers a compelling perspective on the etiology of deficient emotional regulation and its role in maladaptive behaviors.

Attachment Theory and Maladaptive Behavior

The basis of attachment theory is a hypothesized evolutionary human drive to attach to another, more capable human being for safety and protection. Bowlby (1973) began his development of the theory by first recognizing the significance of the mother-child bond. Initially, he discovered high rates of maternal separation experiences in the histories of juvenile delinquents. In further studies, he worked to understand and explain the troubling behaviors observed in young children who also experienced a temporary loss of their mother. Bowlby observed these behaviors among mostly two- to three-year-old children in settings such as hospitals and residential nurseries during separation from their mothers for periods of weeks or months and had no stable mother-substitute. He sought to explain why the institutionalized children suffered extreme distress and even sometimes failed to thrive despite the care and feeding provided by the staff. Bowlby (1973) noted his observations did not follow the current-day explanation that children love their mother simply because they associate her with the satisfaction of the hunger drive.

Bowlby (1982) recognized that “the responses of protest, despair, and detachment” were similar among children over six months of age during separation from their mothers and under the care of strangers. He developed the view that these predictable responses were mainly due to the loss of maternal care at this highly dependent, highly vulnerable stage of development (p.

xiii). During the early stages of his theory development, Bowlby argued that the child's need for his mother's love and presence were as great as his hunger for food. This initial understanding of the extreme reactions exhibited by these children would soon evolve into a theory based on instinctive and adaptive behavior related to human survival, in which "food and eating play no more than a minor role" (p. 180).

Bowlby (1973, 1980, 1982, 1988) theorized that attachment behavior has an evolutionary and biological basis that places the mother-child bond at the center of an innate behavioral system that keeps children near their mothers and safe from predators and other dangers. The responses of distress exhibited by children separated from their mother or primary caregiver are signs of activation of the attachment behavioral system common to both human and non-human species. According to Bowlby, reactions of anxiety and protest, even emotional detachment, are highly adaptive responses to separation from one's primary protector.

Attachment theory proposes these observable behaviors are innate responses that serve to "promote proximity or contact" to the mother, primary caregiver or attachment figure (Ainsworth & Bell, 1970). A child expresses distress because it usually brings the caregiver to their aid. Bowlby (1988) defined two main classes of infant attachment behaviors. Signaling behaviors such as crying, smiling or babbling serve to bring the mother to the child, whereas, approach behaviors such as seeking, following, or clinging serve to bring the child to the mother. However, when there seems to be no hope of reestablishing proximity, the child will move into a phase of despair and sadness accompanied by inactivity. Emotional detachment makes it possible for the child to resume normal activity and possibly even search for a new attachment figure.

The caregiver's ability to sensitively respond to distress signals and soothe the child will ultimately shape the child's attachment style. On the basis of repeated interactions with the

caregiver, infants learn what to expect and adjust their behavior accordingly. Bowlby (1988) explained that these expectations form the basis of mental representations or “internal working models” of self and others. Internal working models serve to predict caregiver availability and responsiveness, as well as organize beliefs and feelings about the self, especially global and social self-esteem (Cassidy, 2008).

Bowlby (1973, 1982, 1988) proposed that early attachment experiences continue to be important throughout the life span because they are, over time, internalized by the child and shape their internal representations or working models of the world and the self in the world.

Bowlby (1973) identified two key features of these internal working models of attachment:

(a) whether or not the attachment figure is judged to be the sort of person who in general responds to calls for support and protection; [and] (b) whether or not the self is judged to be the sort of person towards whom anyone, and the attachment figure in particular is likely to respond in a helpful way. (p. 204)

In other words, internal working models account for an individual’s expectations of how they will be treated and responded to in close relationships.

Based on Bowlby’s attachment theory, Ainsworth and Bell (1970) developed a research technique known as the “Strange Situation” to study the quality of infant attachments to their mothers. Infants who became stressed during exposure to a stranger, both with and without the presence of the mother, were categorized by the researchers according to differences in their ability to seek and receive comfort from their mothers. From these studies, researchers have discerned three typical and one atypical attachment styles or strategies that an individual may develop during their vulnerable years of infancy, childhood, and adolescence (Ainsworth & Bell, 1970).

When children are fortunate enough to have consistently positive interactions with their caregivers, a pattern of *secure attachment* develops. The parent or primary caregiver is “readily

available, sensitive to [the] child's signals, and lovingly responsive when [the child] seeks protection and/or comfort" (Bowlby, 1988, p. 124). Infants confident about the availability, responsiveness, and assistance of the primary caregiver can use their caregiver as a secure base for exploration.

Anxious-ambivalent, anxious-avoidant, and disorganized attachment styles fall under the category of *insecure attachment*. An anxious-ambivalent attachment style may develop when there is uncertainty whether the primary caregiver will be available, responsive, or helpful when needed. An individual with this attachment style is prone to separation anxiety because of this uncertainty (Bowlby, 1988). Caregivers of anxious/ambivalent infants exhibit inconsistent responsiveness to the infant's signals; they are sometimes available or unresponsive and at other times intrusive. Anxious-ambivalent infants were both anxious and angry. These infants had a preoccupation with their caregivers to such a degree that it kept them from exploration.

A third pattern, anxious-avoidant attachment, develops when the child has no confidence that the caregiver will be respond in times of need. In fact, the child expects rejection when seeking comfort or protection. Caregivers of anxious-avoidant infants consistently refused or deflected the infant's request for comfort, especially for close bodily contact. The infants did not exhibit distress with separations, avoided contact with their caregivers, and kept their attention directed towards toys, but with less interest or enthusiasm than securely attached infants (Ainsworth & Bell, 1970). In this pattern, the child's adaptive response would be to learn to live without the love and support of others, or, as Bowlby (1988) described, to become "emotionally self-sufficient."

A fourth classification, disorganized-disoriented attachment, is an atypical pattern characterized by the absence of a coherent strategy for managing anxiety, with a mixture of

avoidant and ambivalent behaviors (Cicchetti, Toth, & Lynch, 1995). Researchers observed that children with this attachment style exhibit fearful behavior upon reunion with their primary caregiver, including freezing, covering their eyes or mouths, spinning, and flapping their hands. Carlson, Cicchetti, Barnett, and Braunwald (1989) found a strong association between this attachment style and physical and emotional abuse, as well as neglect, whereas, Lyons-Ruth and Block (1996) found a child's disorganized attachment is associated with the parent's unresolved loss or trauma and their related parental behaviors that were frightening to the child. Their study results suggested that women with childhood trauma are at elevated risk for hostile or emotionally withdrawn caregiving behavior and for establishing disorganized attachment relationships with their infants.

From an attachment perspective, early experiences of parental neglect or abuse inflicted by one's primary caregiver are confusing and distressing experiences. Numerous researchers recognize childhood exposure to violence as a source of trauma (Dutton, 1999; Johnson, 2003; Van der Kolk, 2005). Dutton (1999) proposed that although witnessing parental violence and being insecurely attached are each sources of trauma, the combination of the two over prolonged and vulnerable development phases would constitute a powerful trauma source. Johnson (2003) explained that the experience of repeated emotional unavailability of the attachment figure at critical moments has the potential to create attachment injury (p. 391). The memory networks of frightening and threatening events consist of related negative beliefs, emotions, images, and physical sensations of the original events. When individuals experience situations that are in any way similar to the original traumatic events, the associated memory networks are automatically triggered. The emotional and physiological arousal from the past is suddenly present. Insecure attachment is then considered both a source and a consequence of trauma (Bowlby, 1973).

Criticisms of attachment theory. While attachment continues to be an influential and well-researched theory, it has also received a great deal of criticism. Researchers (Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000) argue that the “attachment theorists’ emphasis on the evolutionary roots of attachment has led them to downplay the role of culture” (p. 1094). Specifically, the researchers demonstrated how hypotheses that are central to secure attachment (caregiver sensitivity, and emotional and social competence in childhood and adulthood) are deeply rooted in Western principles, and cannot be universally applied. For example, maternal sensitivity in the Japanese culture emphasizes responsiveness to the child's need for social engagement, whereas American sensitivity focuses on responsiveness to the child’s need for individuation. Differing cultural values are further reflected in the U.S. parents’ promotion of exploration, independence, and focus on physical objects, as opposed to the Japanese maternal focus on prolonged physical contact, dependence, and direction of attention to social objects. Rothbaum et al. (2000) explain that when Western researchers observe U.S. mothers promoting maternal dependency, they classify the mothers as insensitive, and the children as insecurely attached.

Equally problematic is the universal application of the characteristics associated with securely attached individuals. Rothbaum et al. (2000) noted that the Western view of secure attachment emphasizes the qualities of self-reliance, individuation, and autonomy. The need to rely on others as a way of meeting one’s needs is “often devalued in the West, [while it] is often favored, even prescribed, in Japan” (p. 1097). The Western value of independence is a clear example of the dissimilarity between Japanese and Western ideas about emotional and social competence. In contrast to the U.S. emphasis on emotional openness, self-expression, and assertiveness, the Japanese culture avoids direct expression of relational discord and expression

of wants, in favor of respectful preservation of harmony. Attachment theory, therefore, fails to take into account the different ways that people around the world think about and behave in close relationships.

In addition to its failure to address cultural differences in definitions of optimal or secure attachment, Cox (2006) offers a feminist perspective regarding attachment theory's narrow focus on the primary caregiver. She identifies the failure of attachment theory to take into account the influence of extended kin, fathers, siblings, and peers on the child's development. Cox explains "this is a limitation in understanding the usefulness of attachment theory as applied to children's development, as children are greatly influenced by others in their social worlds" (p.86). The Feminist perspective is critical of attachment theory's paternalistic ideas of maternal deprivation, and mother blaming when social and interpersonal contexts are not considered.

Harris (2000) expressed disagreement with the belief that behaviors learned from interactions with primary caregivers are automatically carried to other contexts. She emphasized the role and influence of peers groups in shaping behavior and attitudes expressed outside the home. As adolescents begin to seek independence from their parents, and rely more on peers as attachment figures, friendships attachments become important sources of emotional security and support, and prototypes for later relationships. Long-term relationships are formed with peers, which may lead to romantic relationships formed out of the need for attachment. While Harris (2000) acknowledged genetic and parental influence, she proposed that the limitation to attachment theory lies in the lack of attention given to the influence of the individual's social group.

Researchers have also criticized the lack of convergent validity between the various measures of attachment style due to the differences in terminology and methodology

(Bartholomew & Shaver, 1998). Measures of adult attachment style include self-report questionnaires, and interviews, with diverse terminology used to define the attachment styles. Questions remain about how attachment measures of parent-child dyads and adult romantic relationships compare, and whether the differences in adult attachment are best conceptualized by discreet categories (Hazan & Shaver, 1987), or through dimensional models (Fraley & Waller, 1998) which provide measures of the degree of anxiety or avoidance experienced in attachment relationships. However, attachment theory remains a generally accepted model of how early experiences with primary caregivers become transformed into a working models of expectations for all attachment relationships in the future (Berghaus, 2011). Even though these criticisms exist, it is a useful lens for understanding “connectedness” in relationships.

Adult attachment relationships. Bowlby (1988) emphasized that attachment behavior “is a characteristic of human nature throughout our lives—from cradle to grave” (p. 82). Researchers have explored this concept and have demonstrated the stability of attachment behaviors throughout the human life span (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987, 1994; Kobak & Hazan, 1991). The human desire for attachment, love and care appears to be a consistent and predictable response to experiences of distress. These findings suggest that adulthood responses to relational distress will likely reflect the attachment behaviors learned through the early interactions with primary caregivers. Attachment theory helps explain why human beings differ in the way they think, feel, and behave in relationships. During infancy and in adulthood, the important issue is whether the individual perceives their social environment as consistently responsive, inconsistently responsive, or consistently unresponsive to one’s attempt to establish security-promoting closeness (Hazan & Shaver, 1994). Activation of

attachment strategies developed in infancy and childhood occurs when an adult perceives some threat to their adult attachment relationship.

Based on Bowlby's (1973, 1980, 1982, 1988) concept of working model, and Ainsworth and Bell's (1970) typologies of attachment styles, Brennan, Clark, and Shaver (1998) conceptualize individual differences in relationship distress regulation in terms of regions in a two-dimensional space. One dimension is attachment-related avoidance, reflecting the lack of confidence in the availability of the relationship partner, as well as the avoidance and denial of the need for support and attention (Mikulincer & Shaver, 2003). The other dimension is attachment-related anxiety, which reflects the degree to which one worries about the responsiveness and availability of their partner, and has a high fear of rejection, and strong desire for intimacy (Mikulincer & Shaver, 2003). When attachment-related avoidance and anxiety are low, this model places the attachment style in the region of the two-dimensional space reflecting attachment security.

In this two-dimensional measure of adult attachment style, anxious-preoccupied attachment corresponds to Ainsworth & Bell's (1970) anxious-ambivalent attachment style, while the category of dismissive-avoidant attachment corresponds with their anxious/avoidant typology. This model locates fearful/avoidant attachment insecurity in the region of the two-dimensional space where both anxiety and avoidance are high. The fearful-avoidant typology corresponds to Ainsworth & Bell's (1970) disorganized-disoriented attachment style. Attachment-related anxiety leads to hyper-activation of the attachment behavioral system, while attachment-related avoidance leads to de-activation of the attachment system (Consedine, Fiori, & Magai, 2012).

Adult attachment studies (Collins & Read, 1990; Feeney & Noller, 1990) found that anxious attachment correlates with an obsessive preoccupation with a partner's responsiveness; falling in love easily; extreme jealousy; being subject to fear, anxiety, and loneliness; and low self-esteem. Kobak and Hazan (1991) found that anxious individuals engaging in a problem-solving task with their partners tended to express dysfunctional anger. Because attachment researchers believe avoidant attachment is the result of consistent unresponsiveness, the avoidant strategy for adult relationships involves avoidance of intimate contact, especially in stressful or distressing circumstances (Hazan & Shaver, 1994). According to research on adult attachment, avoidance strategies lead to fear of intimacy, a tendency to maintain emotional distance, pessimistic views of relationships, and a high rate of relationship dissolution (Hazan & Shaver, 1987). Researchers also demonstrated that avoidantly attached adults are more likely to be judged as hostile (Kobak & Sceery, 1988). Brennan, Shaver, and Tobey (1991) report that avoidantly attached adults are more prone to engaging in uncommitted sexual relations and using alcohol and other substances to reduce emotional discomfort.

Attachment theories of anger and violence. Researchers have used attachment theory to help explain the development of dysfunctional anger and violent behavior (Bowlby, 1973, 1988; Babcock, Jacobson, Gottman, & Yerington, 2000; Mikulincer, 1998; Shaver & Mikulincer, 2007). Attachment relationships formed with parents, sexual partners, or with one's children involve strong emotional bonds. When individuals perceive threats to these relationships, anger is aroused and can serve as a corrective function in the other's behavior (Bowlby, 1988). An individual's attachment style is their primary behavioral strategy for managing the negative emotions that arise during relational conflicts. Bowlby (1988) emphasized that violence breeds violence and that violence in families tends to perpetuate from one

generation to the next. Attachment theory explains anger dyscontrol and violence as maladaptive attachment behaviors:

a great deal of maladaptive violence met within families can be understood as the distorted and exaggerated versions of behaviour that is potentially functional, especially attachment behavior on the one hand and caregiving behavior on the other (Bowlby, 1988, p. 81).

Bowlby (1973) reported repeated observations of aggression and hostility in children experiencing a separation from their primary caregiver. He explained that the child's angry protest was in response to the parent having been absent or unavailable when wanted. When child and parent are reunited, the child's aggressive behavior directed towards the parent is an expression of anger. Bowlby proposed that whenever a separation is temporary, anger serves the corrective function of discouraging the loved one from going away again (p. 247). Elicited by fear, angry behavior functions as coercion. Bowlby (1973) found that children and adolescents who have experienced repeated separations and threats of abandonment exhibited the most violently angry and dysfunctional responses.

Mikulincer (1998) examined the association between adult attachment style and anger proneness. Based on attachment theory, these researchers expected that differences in attachment style would correlate with different experiences of anger. Proneness to experience anger, described as the frequency, magnitude, and persistence of the emotional state of anger, was more prevalent among persons with anxious attachment than with secure attachment. Securely attached individuals endorsed more constructive goals and enacted more adaptive responses during anger episodes than did insecure persons. His findings also supported the prediction that insecure persons would be more prone to attribute hostile intent to their partner than would

secure persons. Overall, the findings support the idea that anxious attachment is strongly associated with proneness to experience intense anger and negative expectations of other's responses to anger episodes. The author proposes that these maladaptive responses result from the individual's basic belief that significant others are unavailable and insensitive to their needs.

Babcock et al. (2000) proposed that attachment styles be a useful index of an individual's capacity for emotion regulation. When securely attached individuals experience negative affect it "serves a communicative function promoting effective responses from others," whereas those with insecure attachment styles "may experience negative emotions as ineffective for eliciting helpful responses from others, which may lead to the inhibition or exaggeration of negative emotions" (p.392). As an individual attempts to regulate emotions in the context of close personal relationships, especially in romantic attachments, he or she will rely on the styles of emotional expression developed in response to early attachment experiences.

Shaver and Mikulincer (2007) also proposed that attachment theory provides the theoretical basis for a greater understanding of effective emotion regulation. They explained that during emotion regulation, a sense of attachment security supports the use of problem-solving and reappraisal attempts. Due to "their interactions with attachment figures who are (or were) sensitive and responsive to expressed needs for proximity, protection, and support," securely attached persons developed a constructive approach to problem-solving (p. 450). They proposed that secure persons have greater ability to reappraise situations and hold on to an optimistic sense of self-efficacy. In contrast, the researchers suggest that overreactions or maladaptive behavior responses occurring in romantic relationships are fueled by traumatic material encapsulated in the brain and triggered by one's partner.

Neuroscience research supporting attachment theory. Neuroscientist Debra Nuehoff (1999), stressed that the key to breaking the vicious circle of violence lies in the understanding that “events in the outside world, including social interactions, have lasting effects on the neurobiological processes that underlie behavior” (p. 53). Embracing the tenets of attachment theory, she viewed violence as a development process that “begins with a nervous system biased towards survival and social responsiveness, equipped to respond aggressively or fearfully” towards any perceived threat to survival (p. 52). Hazan and Shaver (1994) hypothesized that attachment behavior patterns are virtually the same across the lifespan because the neural foundation of the attachment system remains largely unchanged.

Neuroscience researchers (Cozolino, 2002; Schore, 2003; Siegel, 1999) have referenced attachment theory in support of their research findings, which reveal that the patterns of communication with parents directly shape the child’s nervous system and the brain structures involved in emotion regulation. These researchers share the understanding that the brain is a self-organizing system and that “the self-organization of the developing brain occurs in the context of a relationship with another self, another brain” (Schore, 2003, p.5). Addressing the longstanding debate on whether nature or nurture determines individual development and personality, Siegel (1999) explained that genes do not act in isolation from experience. He allowed that certain temperaments may produce characteristic parental responses, but emphasized that it is “these responses that in turn shape the way in which neuronal growth, interconnections, and pruning (dying back) occur [in the brain]” (p. 18). From the first days of life, the infant brain begins to encode, store, and retrieve information about its environment. Neural networks or circuits within the brain store all incoming information. The type of memory involved in the recall of information or events experienced in the past is called implicit memory.

The making of implicit memory involves the primitive brain structures that are intact at birth and do not require conscious processing during encoding or retrieval. Siegel (1999) explained that implicit memory forms when an infant becomes frightened by a loud noise, for example, from a particular toy, and the brain creates neural connections or circuits that link the physiological arousal with the visual input of the toy. When the infant sees the toy again, the internal emotion responses of fear are automatically activated. With repeated experiences, the infant's brain begins to detect similarities and differences across experiences. This comparative process is the basis of forming generalized representations, which become "mental models" used to interpret present experiences as well as to anticipate future experiences (Siegel, 1999, p. 30). The development of mental models parallels the development of internal working models proposed in attachment theory.

The limbic system and the prefrontal cortex are the principle brain structures involved in emotion regulation and as most directly affected by early attachment experiences (Cozolino, 2002; Schore, 2003; Siegel, 1999). The limbic system is composed of a number of interconnected structures that influence learning, memory, and emotion (Drubach, 2000). At birth, only the amygdala, a primitive component of the brain's limbic structure is online. The amygdala appraises only crude information about external stimuli and directly influences physiological arousal systems in response to incoming stimuli (Schore, 2003). The frontal and prefrontal cortices of the brain, not yet online, will eventually be responsible for determining behavioral choices in response to the physiological arousal orchestrated by the amygdala. As neural networks develop within the frontal cortex, they organize behavior by sustaining a memory of the positive or negative consequences of the behaviors or strategies that are employed (Cozolino, 2002).

Neural connections from the prefrontal cortex to the primitive limbic structures undergo rapid growth and maturation during infancy. The frontal lobe's ability to reappraise, problem solve, consider potential responses, and implement suitable strategies is developing at this critical stage. The strength of these connections and control over the more primitive amygdala responses is use-dependent. Maternal assistance with state regulation stimulates the infant's development of descending neural circuits to the limbic system structures. Experience-dependent maturation of the infant's brain "allows for the development of more complex functional capacities for coping with stressors, especially those from the social environment" (Schoore, 2003, p. 138).

Summary of Literature

A review of the literature pertaining to the etiology and treatment of anger dysregulation suggests that, for many individuals, current-day anger management programs may not be as effective as commonly believed in the reduction of anger or recidivism. With a greater understanding of the numerous factors involved in the development of anger dysregulation, it appears that the term anger management does not adequately describe the complexity of the issue. Poor emotion regulation, as opposed to poor anger management, emerges as a better explanation for the anger dyscontrol associated with aggressive and violent behavior. Attachment research and supporting neurological research have emphasized the complexity of emotion dysregulation and suggest a need to explore further for individual differences in the development of anger dysregulation.

This review does support the need for CBT-based interventions focused on teaching the skills and strategies of problem-solving, interpersonal communication, self-awareness, and self-regulation that many individuals fail to obtain from their families of origin. However, the

literature also reveals the deficits of traditional CBT-based programs in addressing the very individualized and relational causes of anger dysregulation that originate from traumatic events that threaten attachment relationships. Therefore, there is not only a need for researchers to conduct anger management outcome studies, but there is also a need for improvement in the consistency of anger constructs and anger assessments utilized in such studies. An outcome study utilizing a comprehensive measure of the cognitive, physiological, and behavioral components of anger may contribute to a better understanding of the current approach to anger management interventions. Additionally, research on attachment style and adverse childhood experiences may promote the use of alternative or adjunct treatment approaches for violent individuals.

Proposed Study

Given that there continues to be considerable debate about the interpretation of data among studies reporting the efficacy of CBT for the treatment of anger dysregulation, further investigation is warranted. The current literature about the development of anger dysregulation points to the possibility of an individual history of disturbing or traumatic experiences, often occurring within an attachment relationship. It follows that measures of trauma history and attachment style may improve an outcome study on a CBT-based treatment program. It also follows that a closer, in-depth exploration of individual histories and experiences would provide descriptions of relevant contextual conditions associated with the development of anger dysregulation.

The primary research question guiding the study was, “How does context inform the relationship between attachment, trauma, and treatment outcome among violent offenders attending a group CBT-based anger management program?” To more fully address the primary

research question and manage the analysis, the researcher divided the primary research question into four sub-questions:

1. What is the relationship between trauma, attachment, and treatment outcome?
2. Do individuals with an insecure attachment style present with greater difficulty in anger disposition?
3. Do individuals with higher trauma scores present with greater difficulty in anger disposition?
4. How does context inform the relationship between trauma, attachment, and treatment outcome?

CHAPTER III

METHODOLOGY

Research Design

The study was designed to explore the relationships between trauma history, attachment style, and treatment outcome among clients who committed a violent offense and were court mandated to attend a community-based group anger management program. The study utilized a mixed method, multiple case study design to explore experiential and behavioral aspects of the complex phenomenon of anger dysregulation. The study was qualitatively driven, with a simultaneous, quantitative component. This design assisted the researcher in exploring for associations among experiential and behavioral components related to the complex phenomenon (Morse & Niehaus, 2009). The results of the quantitative data analyses contributed to the description of individual experiences and the complex nature of anger dysregulation presumed to be a precursor to the individual's violent behavior.

A multiple case study approach allows the researcher to compare the profiles of a small number of participants. Yin (2014) explained that case study design is an empirical inquiry used to investigate a phenomenon (the case) in depth and within its real-world context. For this study, a multiple case study approach was used to illustrate the individualized and complex nature of anger dysregulation presumed to be a precursor to violent behavior. A greater understanding of anger dysregulation and treatment outcome involves consideration of important contextual conditions pertinent to the individual cases. The context for this research was the group format of the anger management program, which lent itself well to replication approach of the multiple case design. This design allowed the researcher to compare and contrast outcome results and explore multiple variables among cases undergoing the same treatment intervention (Yin, 2014).

The multiple case study approach obtained individual perceptions and experiences of anger arousal, anger in the family of origin, trauma history, and experiences with primary caregivers to provide a rich and diverse picture of possible etiological and maintaining factors of anger dysregulation. Along with quantitative data, qualitative data were collected using semi-structured interviews (Appendix A and Appendix B) and provided a profile of each case in the study. Interviews were designed to elicit participants' descriptions of their offense, experiences of anger in their family of origin, trauma, perspectives on their ability to regulate anger arousal, their experiences in the group anger management program, and perceived benefits of attending the group program.

Overview of qualitative component. Providing multiple perspectives (in this case, time perspectives) of the same phenomenon strengthens the trustworthiness or construct validity of a case study (Creswell, 2007; Yin, 2013). Individual perspectives and experiences were elicited through the Entrance and Exit Interviews (Appendices A and B), with the goal of identifying themes relevant to the constructs of interest (trauma, attachment, anger dysregulation, and treatment outcome).

Qualitative content analysis. Qualitative content analysis was used to identify important themes or categories within the interview content, as well as to provide a richer description of the context and variables related to aggressive and violent behavior (Zhang & Wildemuth, YEAR). More specifically, a direct content analysis approach was applied, with the goal of expanding current theory and existing research on anger dysregulation presumed to be a precursor to violent behavior. Hsieh and Shannon (2005) explained that direct content analysis is used when the researcher seeks to validate or conceptually extend a theoretical framework or theory. Existing

theories of attachment, emotion regulation, and trauma were used to focus the research questions and to develop initial coding schemes.

Trustworthiness of the case studies was increased by the creation of a case study database for cross-case comparisons (Yin, 2014). With the use of the computer-assisted qualitative analysis software, MAXQDA, responses to the interview questions were organized, coded, and categorized for easy retrieval and to aid in analysis (www.maxqda.com, 2013). Again, returning to the research questions, the technique of direct content analysis was used to explore with-in case and cross-case patterns and to explore for rival or alternative explanations (Yin, 2013).

Triangulation of data. Triangulation of qualitative and quantitative data occurred at two points in the study analysis. The convergence of the two lines of inquiry occurred during the with-in case analysis, as well as during the cross-case analysis. Salient themes in the qualitative data analysis were compared with significant results from the quantitative data analysis. Data triangulation helped increase construct validity and confidence that the case study has rendered the event or phenomenon accurately (Yin, 2014). Interview questions and study instruments provided overlapping data on the variables of interest. Data triangulation informed the summary and implications of the research findings.

Overview of quantitative component. The study obtained data on childhood trauma, attachment style, and treatment outcome using quantitative measures. To answer the study's global research question, scores from self-report measures were used to create the independent and dependent variables.

Independent variables. The independent variables, or possible predictor variables in treatment outcome, were the demographic variables (Appendix C), scores on the Experience in

Close Relationships—Revised (ECR-R, Appendix D), and the scores on the Adverse Childhood Experience (ACE) Questionnaire (Appendix E).

Dependent variables. The dependent variables were the scores on the Novaco Anger Scale (NAS, Appendix F).

Quantitative data analysis. Scores on the pre- and post-treatment NAS were compared to the norms of the standardization sample for this instrument. Clinically, significant change is identified by a *t*-score change greater than five, so this criterion was used in this study. The NAS standard scores are *t*-scores that have a mean of 50 and a standard deviation of 10. The instrument included a Profile Sheet providing the corresponding *t*-score for all possible raw scores. Therefore, a score that is more than half a standard deviation from the mean is meaningfully different from the mean and is relevant for interpretation (Novaco, 2003).

Statistical analysis. The raw scores from the NAS were utilized to produce descriptive statistics of the data, and statistical analyses. All statistical analyses were conducted using SPSS. The pre-treatment and post-treatment raw scores were normally distributed in the sample (no significant skewness or kurtosis). Therefore, parametric analyses, repeated measures ANOVA and *t* tests, were used to explore research questions 1-3. All analyses were set at the .05 level of significance.

Recruitment

Recruitment setting. Ten to twelve participants were recruited from a population of individuals who have been court-mandated to attend an anger management program, and have registered for the group CBT-based program offered at a for-profit agency located in south

Texas. The agency provides a group CBT-based anger management program that consists of eight (8) one and one half-hour, weekly sessions, for a total of 12 hours.

Participants were informed of the study by a recruitment flyer that provided a brief description of the study, and the researcher's name and telephone number (see Appendix G. The recruitment flyer was placed on the information tables located in the waiting area at the agency office, as well as posted with other agency flyers and advertisement materials. The recruitment flyer included pull-off tabs to allow interested individuals to contact the researcher. Once potential participants made contact with the researcher, the researcher scheduled a meeting at the agency offices within one week from their first anger management group meeting to discuss the study, answered questions, screened participants and went through the informed consent process (see Appendix H).

Review of the informed consent included a discussion regarding the researcher and licensed therapist limits to confidentiality upon participant disclosure of abuse to a child, vulnerable person, or elderly person; the limits to interview discussions to adjudicated offense only, and the avoidance of using any real names (of those identified in the participant's narratives) during participant responses. Additionally, participants were informed that their pseudonyms (from both the Entrance and Exit Interviews) would undergo further de-identification upon completion of the Exit Interview (see Appendix B). The completion of the Exit Interview marked the completion of data collection and the end of their ability to voluntarily withdraw their data. At this point, the pseudonyms were transformed into identification numbers for data entry and data analysis. All consent forms were immediately separated from the data (sent to a faculty advisor in a different city) and will be kept by the faculty advisor in a locked storage cabinet in a locked office for five years.

Participants were offered meeting times away from the scheduled group class dates to protect their privacy. If meetings were scheduled around their group class date and time, interviews were conducted in one of the agency's private offices away from the usual office activities and traffic flow. Participants were reminded that their decision to participate or not participate in the study would not affect their relationship or services provided by the agency. Due to transportation and scheduling issues faced by participants, it was determined that the agency would be the most convenient location for conducting the interviews.

Participants

Eligible participants must have been 18 years old or older, and court-mandated to attend a community-based anger management program due to their perpetration of threatening, harmful, or potentially harmful behavior against another individual. Volunteers were subject to exclusion from participating upon review of their scores on the Substance Abuse Subtle Screening Inventory (SASSI-3) and the Beck Depression Inventory (BDI-II), assessment instruments administered during the program registration process. Individuals volunteering to participate in the study were excluded based on the following criteria:

- 1) When it is determined that there is a high probability of moderate to severe substance use disorder for the individual, as measured by the SASSI-3
- 2) When the individual's Beck Depression Inventory (BDI-II) yields a score higher than 13
- 3) If they are under the age of 18

Participant data was withdrawn from the study based on the following criteria:

- 1) When the participant failed to complete the anger management program in its entirety, including incarceration due to violation of probation conditions successfully

- 2) If the participant made any disclosure of an offense that had not been adjudicated, including abuse of a child, disabled person, or elderly person

Participants excluded or withdrawn from the study for any of the above reasons were thanked for their time and the principal investigator ended all contact with the participant.

After participant eligibility was determined and they provided informed consent, they were asked to provide the researcher with a pseudonym to be used throughout the interview process and on their paper & pencil assessment instruments. The researcher kept a list of pseudonyms used to prevent duplication of names. Participants were informed that the interview would be recorded and that the audio recordings would be destroyed after the transcription process was completed. Participants were informed that the researcher would address them by their selected pseudonym only. Participants were instructed not to use any real names in their responses to the interview questions, and to identify only the relationship of other individuals mentioned (e.g., father, son, aunt, friend, sister). Participants were instructed to discuss only the case that has been adjudicated by the court.

Procedures

Upon receipt of the volunteer's signed Release of Confidential Information Form (Appendix I), the agency provided the researcher with the participant scores on the assessments administered during the anger management class registration process. These instruments are the Substance Abuse Subtle Screening Inventory (SASSI-3) and the Beck Depression Inventory – Second Edition (BDI-II). Volunteers were excluded from participation in the research when it was determined that there was a high probability of a substance use disorder (SUD) for the individual, as measured by the SASSI-3, or when the individual's Beck

Depression Inventory (BDI-II) yielded a score higher than 13. Scores from 0 to 13 indicate a range of minimal depression severity (Beck, Steer, & Brown, 1996).

The study included two, time points of data collection (Entrance Interview and Exit Interview). The Entrance Interview (Appendix A) and the Exit Interview (Appendix B) began with the primary investigator informing the participant that she would be asking questions about his past experiences that may bring up negative and disturbing emotions. Participants were informed that they could stop the interview at any time, choosing to proceed at a later time, or choosing to withdraw from the study. As the primary investigator is a mental health provider, care and caution were taken during the interviews to assess for participant comfort level or distress. Additionally, participants were referred to the agency for individual counseling should they seek assistance with persistent emotional discomfort.

The Entrance Interview included a semi-structured interview and participant completion of the Demographic Information Form (Appendix C), three questionnaires (Experience in Close Relationships Questionnaire (ECR-R), Appendix D; Adverse Childhood Experience (ACE) Questionnaire, Appendix E; Novaco Anger Scale (NAS), Appendix F), and lasted approximately 90 minutes. The semi-structured Entrance Interview included questions regarding the adjudicated offense, participant perspectives on anger regulation ability during the offense and in the past, anger experiences in the family of origin, trauma history, experiences with primary caregivers, and experiences of successful anger regulation. The Entrance Interview was conducted within one week of their initial group anger management meeting.

The Exit Interview was scheduled during the Entrance Interview process. Participants were asked to select a date and time within one week of the scheduled completion date of the anger management program. An appointment reminder card was completed by the participant

and kept in a different city, in the possession of the dissertation chair. The dissertation chair was prompted to mail the reminder cards two weeks prior to the scheduled Exit Interview appointment dates. In the event of a delayed completion date due to a participant's absence (makeup class was scheduled), the reminder cards instructed the participant to contact the principal investigator to reschedule the Exit Interview under their pseudonym.

The Exit Interview included the semi-structured interview and completion of one assessment instrument (repeat of the Novaco Anger Scale), and was expected to take approximately 45 minutes. The semi-structured Exit Interview included questions regarding participants' perceptions of change that have occurred as a result of their attendance in the anger management program. The researcher asked the participant to provide their pseudonym for use throughout the interview process and on the assessment instrument. The participant was reminded of the researcher and licensed practitioner limits to confidentiality. The participant was reminded not to use any real names in their responses, but identify only their relationship to individuals mentioned. The participant was reminded only to discuss the offense that has been adjudicated.

Upon completion of the Exit Interview process, participants were reminded of the end of their ability to voluntarily withdraw their data once they leave the Exit Interview. Participants were reminded that their pseudonyms would undergo further de-identification because they would be transformed into identification numbers for data entry and data analysis. The original assessment instruments bearing the pseudonym names left the city and remained in the possession of the dissertation advisor.

Participant screening instruments. The Substance Abuse Subtle Screening Inventory (SASSI-3) and the Beck Depression Inventory – Second Edition (BDI-II) are two assessment

instruments administered during the anger management program's registration process. Upon receipt of the participant's signed Release of Confidential Information Form, the agency provided the researcher with the participant scores for these two assessments.

The SASSI-3 is a self-report, psychological questionnaire designed to screen individuals for SUDs. It is widely used and accepted as a valid and reliable instrument by many diverse types organizations, including addictions treatment programs, criminal justice programs, hospitals, other health care organizations, and employee assistance programs. It has a 93 percent rate of accuracy in identifying individuals with substance dependence disorders. SASSI-3 decision rules classify scores as positive or negative for a high probability of having a SUD (Miller & Lazowski, 1999). Volunteers were excluded from participation when it was determined that there was a high probability of a SUD for the individual.

The BDI-II is a 21-item self-report instrument for measuring the severity of depression in adults and adolescents age 13 years and older. It has been widely accepted as a valid and reliable measure for assessing the severity of depression in diagnosed patients and for detecting possible depression in normal populations. Scores from 0–13 fall in the range of minimal depression severity; scores from 14–19 fall in the mild range of depression severity; scores from 20–28 are in the moderate range; and scores from 29–63 fall in the range of severe depression. For research purposes of decreasing the possibility of any false negatives, the lower threshold of 13 as a cut-off score was adopted (Beck, Steer, & Brown, 1996). Volunteers were excluded from participation when the individual's Beck Depression Inventory (BDI-II) yields a score higher than 13.

Demographic data. The Demographic Information Form (Appendix C) was used to collect participant demographic information such as age, gender, race, marital status, number of children, and arrest history. Participants completed this form during the Entrance Interview.

Interview guides. The researcher used interview guides (Appendix A and B) during each participant's interview. The semi-structured interview guide was used because the researcher gained the knowledge during the literature review to develop questions pertaining to the phenomenon (emotion regulation), but still does not necessarily know all the possible responses. Additionally, the semi-structured nature of the interview allowed the researcher to control the interview, seeking targeted, specific information, while allowing participants "freedom within limits" to share their experiences (Morse & Niehaus, 2009).

Entrance Interview guide. The interview began with a reminder of researcher and licensed therapist limits to confidentiality:

"If during our interview you disclose abuse of a child, disabled person, or elderly person, I will have to stop the interview. I will also have to report that information to law enforcement."

Participants were instructed to discuss only the case that has been adjudicated by the court. Participants were informed that the researcher would address them by their selected pseudonym only. Participants were instructed not to use any real names in their responses to the interview questions, and to identify only the relationship of other individuals mentioned (e.g., father, son, aunt, friend, sister). The principle investigator reminded the participant that she would be asking questions about their past experiences that may bring up negative and disturbing emotions. Participants were informed that they may stop the interview at any time, choosing to proceed at a later time, or choosing to withdraw from the study. Participants were reminded that

they would be referred to the agency for individual counseling should they seek assistance with persistent emotional discomfort.

The primary investigator asked all the questions from the ACE questionnaire at the beginning of the Entrance Interview. The following questions guided the remainder of the interview process for participants just entering the anger management program (Appendix A).

1. Please describe the incident for which you have been required to take an anger management class (offense, victim, events surrounding the offense).
2. As you reflect on the incident just described, do you think that difficulty in controlling your anger was what led to your behavior?
3. As you think about the incident you just described, would it be reflective of the way the family you born into handled anger? How did you know when someone was angry?
4. Would you say you have experienced any event or events in your lifetime that could be described as traumatic? Be sure to consider your entire life, growing up as well as adulthood. Please keep in mind that you only need to share what you feel comfortable sharing and what I shared earlier about limits of confidentiality. If yes, please explain.
5. As you think about growing up, and the person that took care of you the most, do you feel that this person was someone you could depend on? Please keep in mind that you only need to share what you feel comfortable sharing. Also remember what I shared earlier about limits of confidentiality. If no, in what ways were they not dependable?

6. Did you feel the person who took care of you was abusive or neglectful? Again, I will remind you that you only need to share what you feel comfortable sharing and what I shared earlier about limits of confidentiality. If yes, how were they abusive or neglectful?
7. How have you handled anger successfully in the past?

Exit interview guide. The interview began with a reminder of researcher and licensed therapist limits to confidentiality:

“If during our interview you disclose abuse of a child, disabled person, or elderly person, I will have to stop the interview. I will also have to report that information to law enforcement.” The principle investigator reminded the participant that she would be asking questions about their past experiences that may bring up negative and disturbing emotions. Participants were informed that they could stop the interview at any time, choosing to proceed at a later time, or choosing to withdraw from the study. Participants were reminded that they would be referred to the agency for individual counseling should they seek assistance with persistent emotional discomfort.

The following questions acted as an interview guide for participants who have completed the anger management program (Appendix B).

1. As you reflect on the incident for which you have been required to take an anger management class, do you now think that difficulty in controlling your anger is what led to your behavior?

2. Has anger control been a problem for you currently, especially as you think about the incident for which you were required to attend anger management? If so, please explain.
3. Please share three pieces of information you learned about your anger arousal from your attendance in the group anger management program.
4. As you reflect on your experience in the group anger management program, what was the most helpful information you received? How would it help you in a future incident similar to the one for which you were required to attend anger management?
5. What changes in your thinking have occurred for you? What aspects of the program do you think helped the most?
6. Most recently, as you think about the incident that required you to attend anger management, how have you handled your anger successfully?

The question of success (question #8 Entrance Interview and question #6 Exit Interview) was intentionally inserted at the end of the interview to facilitate a positive mood shift to the positives of the participants' behavior, rather than the negative.

Measures. The Experiences in Close Relationships-Revised Adult Attachment Questionnaire (ECR-R, Appendix D), the Adverse Childhood Experience (ACE) Questionnaire (Appendix E), and the Novaco Anger Scale (NAS, Appendix F), were administered within one week of the client's first anger management class. The primary investigator asked all the questions from ACE questionnaire at the beginning of the Entrance Interview. The participant completed the ECR-R and the NAS independently.

The NAS, a measure of treatment outcome, was again administered during the Exit Interview upon completion of the group anger management classes. All assessment measures were administered in hard copy format, and clients recorded their responses on the measure.

Experiences in Close Relationships-Revised Adult Attachment Questionnaire (ECR-R).

The ECR-R (Fraley, Waller, & Brennan, 2000) is a self-report questionnaire designed to measure attachment style defined as the way an individual relates to others in the context of intimate relationships (see Appendix D). It was designed to assess individual differences with respect to attachment-related anxiety (i.e., the extent to which people are insecure vs. secure about their partner's availability and responsiveness) and attachment-related avoidance (i.e., the extent to which people are uncomfortable being close to others vs. secure depending on others) (Fraley, 2010). The ECR-R focuses on how one generally experiences relationships with response options ranging from 1 = *Strongly Disagree* to 7 = *Strongly Agree* on a 7-point Likert scale. Two subscale scores were generated to identify secure vs. insecure attachment style: 1) attachment-related anxiety with a range of 1 to 3.49 = *low anxiety* (secure) and 3.50 to 7 = *high anxiety* (insecure); 2) attachment-related avoidance with a range of 1 to 3.49 = *low avoidance* (secure) and 3.50 to 7 = *high avoidance* (insecure). The two scores were plotted in a two-dimensional space defined by attachment-related anxiety and avoidance. An approximate position in this space was located in one of four quadrants (Secure, Preoccupied, Dismissing-Avoidant, or Fearful-Avoidant). Scores low in Avoidance and low in Anxiety fell into the Secure quadrant. Scores low in Avoidance and high in Anxiety fell into the Preoccupied quadrant. Scores low in Anxiety and high in Avoidance fell into the Dismissing-Avoidant quadrant. Scores high in Anxiety and high in Avoidance fell into the Fearful-Avoidant quadrant. The ECR-R is an updated and improved version of the Experiences in Close Relationships Questionnaire (ECR,

Brennan, Clark, & Shaver, 1998), which is among the most commonly used measures of adult attachment. The ECR was improved by using item-response theory to select items with optimal psychometric properties. The current ECR-R demonstrated increased measurement precision by 50% to 100% without increasing the number of items (Fraley, Waller, & Brennan, 2000).

The original ECR was developed using results from a sample of 1,086 undergraduates (Brennan, Clark, & Shaver, 1998). Parker, Johnson, and Ketring (2011) analyzed the factor structure of the ECR instrument among a clinical population consisting of 1,138 individuals (62.4% Caucasian, 21.7% African –American, 4.7% Latino, and 6% other) and found that reliability among men’s responses on the anxiety subscale was .91, and .90 on the avoidance subscale. Women’s responses indicated a reliability score of .90 on both the anxiety and avoidance subscales. The estimate of internal consistency reliability for the ECR-R was found to be .90 (Sibley & Liu, 2004).

Adverse Childhood Experience (ACE) Questionnaire. The ACE questionnaire explores adverse childhood experiences and was taken from the Adverse Childhood Experiences (ACE) Study (Felitti et al., 1998), one of the largest investigations ever conducted to assess associations between childhood maltreatment and later-life health and well-being (Appendix E). The study was a collaboration between the Centers for Disease Control and Prevention and Kaiser Permanente’s Health Appraisal Clinic in San Diego, California. More than 17,000 Health Maintenance Organization (HMO) members undergoing a comprehensive physical examination chose to provide detailed information about their childhood experience of abuse, neglect, and family dysfunction. To date, more than 50 scientific articles pertaining to ACE research study findings have been published. The ACE study findings suggest that certain experiences are major risk factors for the leading causes of illness and death, as well as poor quality of life in the

United States. The researchers propose that progress in preventing and recovering from the nation's worst health and social problems is likely to benefit from understanding that many of these problems arise as a consequence of adverse childhood experiences.

The ACE questionnaire attributes one point for each category of exposure to child abuse or neglect, with points adding up to scores of 0 to 10. A significant finding from the ACE study was the negative, cumulative effects of endorsing more than one ACE category. In other words, the higher the score, the greater the exposure, and therefore the greater the risk of negative consequences. The number of times a person answered yes to these ten categories (the ACE score) strongly predicted illness and premature death in adulthood. The psychiatric consequences were clear as well, since exponential increases in mental health issues such as depression and suicide were also associated with multiple endorsements of adverse childhood experiences. Questions for the ACE were taken from various published surveys, such as the Conflicts Tactics Scale and the 1988 National Health Interview Survey (Felitti et al., 1998).

Novaco Anger Scale (NAS-PI). The NAS-PI (Novaco, 2003) The NAS-PI is a two-part, self-report questionnaire designed to assess the degree of change in anger disposition (Appendix F). It can be used as a measurement tool for research, individual assessment, and treatment outcome evaluation. Theoretically, anger is considered to be a significant activator for violent behavior. Most of the items on part one of the assessment (NAS) address anger reactivity that reflects poorly regulated responses. For the purposes of this study: 1) to provide a measure of the independent variable, anger disposition, and 2) to provide a comparative measure (pre- and post-treatment) for the evaluation of treatment outcome, only the NAS Total scores derived from the NAS (part one) were used for analyses. The NAS Total score is the sum of item response values for the three subscales: Cognition (COG), Arousal (ARO), and Behavior (BEH). The COG score

is determined by responses given to 16 items that ask about anger engendering thoughts. The 16 ARO items focus on the physical experience of the anger response, and the 16 BEH items ask about behaviors that are problematic and indicate a risk of violence (Novaco, 2003).

The NAS-PI was standardized on an age-stratified sample of 1,546 persons, ages 9 to 84. Separate norms are provided for preadolescents or adolescents (ages 9 to 18) and adults (ages 19 and older). The NAS-PI has consistently been found to have good reliability across many different samples. Internal reliability estimates in the standardization sample were .94 for the NAS Total score. For the NAS subscales, reliability estimates range from .76 to .89, with a median value of .83 (Novaco, 2003).

The NAS Total score contains 48 items focusing on individual experiences of anger. A respondent is asked to rate how closely each NAS item comes to describing his or her experiences, sentiments, and inclinations pertinent to anger on a 3-point Likert scale with response options of 1 = *Never true*, 2 = *Sometimes true*, and 3 = *Always true*. The NAS Total score is the sum of item response values for all the NAS items on the Cognition (COG), Arousal (ARO), and Behavior (BEH) subscales scores. These subscales describe anger engendering cognitions, anger arousal, and angry behaviors (Novaco, 2003).

The NAS standard scores are *t*-scores, and are provided on the assessment instrument. Raw scores correspond to the instrument *t*-scores having a mean of 50 and a standard deviation of 10. They are normalized (as opposed to linear) *T*-scores. Novaco (2003) explained that the normalization process adjusted for skewness in the distribution of scores on each scale so that the same *t*-score corresponds to the same percentile rank for every scale, with the result that an increase or decrease of 1 *t*-score point on each scale can be considered proportionally equal across the scales (p. 13).

T-scores help to identify areas of clinical concern by providing clinical meaning for the various *t*-score ranges. In general, scores from 45 to 55 are considered to be Average. Scores from 40*T* to 44*T* are described as Low Average, scores of 39*T* or lower are considered Low, and scores of 29*T* or lower are considered Very Low. Scores from 56*T* to 59*T* are in the High Average range. Scores of 60*T* to 69*T* are considered High, and scores of 70*T* or higher are considered Very High (Novaco, 2003). For the NAS, clinically significant change is identified by a *t*-score change of at least 5 (Novaco, 2003), and this criterion was used in this study. A *t*-score five (5) points above 50 is higher than 69% of that population. Therefore, a score that is half a standard deviation from the mean is identified as clinically meaningfully different from that mean and therefore relevant for interpretation.

In anger assessment studies with clinical samples, the NAS Total score has been found to be substantially correlated with Buss-Durkee Hostility Inventory Total Score, $r = .82$; the Caprara scales of Irritability, $r = .78$, and Rumination, $r = .69$; the Cook-Medley Hostility, $r = .68$; and the STAXI Trait Anger Scale, $r = .84$ (Novaco, 1994). The NAS Total score has been shown to be strongly related to the STAXI Total score, $r = .77$ (Novaco & Chemtob, 2002).

Chapter IV

Results

This study was designed to explore the relationship between attachment style, trauma, and treatment outcome among a group of violent offenders attending a group Cognitive Behavioral Therapy-based anger management program. The sample population was a group of seven (7) men who were on probation for assault charges and attending the anger management program as a condition of their probation. A mixed method, multiple case study design utilized quantitative and qualitative data to address the primary research question: “How does context inform the relationship between attachment, trauma, and treatment outcome among violent offenders attending a group CBT-based anger management program?”

To more fully address the primary research question and manage the analysis, the researcher divided the primary research question into four sub-questions:

1. What is the relationship between attachment, trauma, and treatment outcome?
2. Do individuals with an insecure attachment style present with greater difficulty in anger disposition?
3. Do individuals with a history of trauma present with greater difficulty in anger disposition?
4. How does context inform the relationship between attachment, trauma, and treatment outcome?

Analysis of Questions 1, 2 and 3 utilized quantitative analytical strategies, while analysis of research question 4 engaged a qualitative analytical strategy.

This chapter provides a summary of demographic data before presenting the results and findings for the four sub-questions. In sections that follow, the reader will first find a review of the quantitative data and results in order to provide more context for the qualitative data that follows. Results for Questions 1-3 clarified the variables of interest (attachment style, trauma history, and anger disposition). These results were helpful in creating profiles using participants' descriptors in the reporting of the qualitative findings.

Then the reader will find salient findings from the directive content analysis. Excerpts from participants' interviews will support each theme and sub-themes when they are present. Contextual information on the speaker of each will follow each quote (inside parentheses). Findings for question 4 identify the qualitative aspects of context. Participants' descriptors contribute to interpretations of the participant narratives, as well as illustrate areas of convergence and divergence among the quantitative and qualitative data. Finally, a summary section reviews the findings for the primary research question and sub-questions 1-4. Discussion of the primary research question and sub-questions occur in Chapter 5.

Demographic Data

At the start of the study, nine (9) participants met the criteria for inclusion in the research study. Two individuals (22.2%) did not complete the anger management program. The agency administrator dropped both individuals from the program due to excessive absences. The researcher withdrew their data from the study; therefore, this chapter reports data on the remaining seven (77.8%) participants.

Age. The average age of entry into the anger management program was 35.7 years. Two (2) of the seven participants were under the age of 25 (n=2, 28.6%); three (3) participants were in

the age range of 34 to 41 years old (n=3, 42.9%); and the remaining two (2) participants were in the age range of 46 to 53 years old (n=2, 28.6%).

Race. Regarding race, three (3) of seven participants identified as Caucasian (n = 3; 42.9%). Two (2) participants identified as Latino/Hispanic (28.6%); one (1) participant classified himself as African-American (14.3%), and the final participant (1) identified as Asian (14.3%). Therefore, the majority of the sample were people of color (n = 4; 57%). (Table 1).

Marital status. Three (3) participants reported they were married (n=3, 42.9%); one (1) participant identified as single (n=1, 14.3%); one (1) participant identified as separated (n=1, 14.3%); and two (2) participants reported they were divorced (n=2, 28.6%). (Table 1).

Children present in the household. All participants reported that at least one child was currently living their households (information on gender was unavailable). Three (3) participants (n = 3, 42.9%) reported that the children present were their biological children. Two participants (n = 2, 28.6%) reported the children in their household were stepchildren, and the remaining participants (n = 2, 28.6%) reported the children belonged to their siblings. (Table 1).

Offense and victim. Table 1 presents the type of violent offense committed by each of the seven participants and the victim in the offense. Six (6) out of the seven participants were charged with assaults on their romantic partners (spouse or girlfriend). One participant was charged with an assault on his stepdaughter. All participants reported the offense was their first offense, with no prior arrests or charges.

Table 1 summarizes participants' demographic information. Names provided in the table represent pseudonyms created by the researcher.

Table 1

Offense and Demographic Information of Participants

Participant	Age	Offense and victim	Race	Marital status	Children in household
Blake	34-37	Assault/Spouse	Caucasian	Married	1
Charles	50-53	Assault/Stepchild	African-American	Married	1
Chris	22-25	Assault/Girlfriend	Hispanic	Single	2
Jason	34-37	Assault/Spouse	Asian	Married	2
Kyle	38-41	Assault/Spouse	Caucasian	Divorced	2
Matthew	46-49	Assault/Spouse	Caucasian	Separated	2
Richard	18-21	Assault/Spouse	Hispanic	Divorced	2

Preliminary Analyses

Psychometric measures of the variables of interest were obtained from three questionnaires. During the pre-treatment interview, participants completed the Experience in Close Relationships Questionnaire (ECR-R), and the Adverse Childhood Experience Questionnaire (ACE), which provided measures of the independent variables, attachment style, and trauma, respectively. The Novaco Anger Scale (NAS) provided the measure of the dependent variable, anger disposition, and was administered to participants during the pre-treatment interview, and repeated during the post-treatment interview. The anger disposition scores obtained from the NAS were utilized to assess therapeutic change, or treatment outcome, from the pre-treatment assessment to the post-treatment assessment.

Experience in Close Relationships Questionnaire (ECR-R). Participants' attachment styles were measured by the ECR-R (Fraley, Waller, & Brennan, 2000) which assesses individual differences in attachment style on the dimensions of attachment-related anxiety (i.e., the extent to which people are insecure vs. secure about their partner's availability and responsiveness) and attachment-related avoidance (i.e., the extent to which people are uncomfortable being close to others vs. securely depending on others). Scores fall into one of four attachment styles: secure attachment, or one of the three insecure styles – preoccupied-anxious, fearful-avoidant, or dismissing-avoidant. Four (57.1%) out of the seven participants were categorized as having insecure attachment styles (Blake, Chris, Kyle, and Matthew). Therefore, based on their responses to the ECR-R, the majority of the participants experienced either attachment-related anxiety, avoidance, or both in their emotionally intimate relationships. Table 2 provides the attachment style for each participant based on their responses to the ECR-R items.

Table 2

Participant Attachment Style Based on ECR-R

Attachment style	Attachment type	% (N=7)	Participant
Insecure	Dismissing – Avoidant	28.6%	Chris Matthew
	Fearful – Avoidant	14.3%	Kyle
	Preoccupied – Anxious	14.3%	Blake
Secure		42.9%	Charles Jason Richard

Adverse Childhood Experience Questionnaire (ACE). The ACE Questionnaire provides a measure of cumulative stress experienced during childhood (before the age of 18). In other words, the higher the score, the greater the trauma exposure, and, therefore, the greater the risk of negative physical and mental health consequences (Dong, Anda, Dube, Giles, & Felitti, 2003). Table 3 provides the ACE score and the category of adverse childhood experience endorsed by each participant.

Table 3

Participant ACE Scores and Categories

	Blake	Charles	Jason	Kyle	Richard	Chris	Matthew
ACE Score	1	1	1	1	2	3	4
Emotional Abuse						Yes	
Physical Abuse			Yes			Yes	Yes
Sexual Abuse							Yes
Emotional Neglect				Yes		Yes	
Parental Sep/Divorce	Yes				Yes		Yes
HH Sub. Abuse					Yes		Yes
Mental Illness in HH		Yes					

All participants reported, at least, one adverse childhood experience. Categories of adverse experiences endorsed by the participants include: Emotional Abuse (n = 1, 14.3%), Physical Abuse (n = 3, 42.9%), Sexual Abuse (n = 1, 14.3%), Emotional Neglect (n = 2, 28.6%), Parental Separation or Divorce (n = 3, 42.9%), Household Substance Abuse (n = 2, 28.6%), and

Household Mental Illness (n = 1, 14.3%). No participant endorsed the categories of Physical Neglect, Mother Treated Violently, or Incarcerated Household Member.

Novaco Anger Scale (NAS). The NAS is a self-report questionnaire designed to assess anger as a problem of psychological functioning, and to assess therapeutic change. The NAS Total score is the sum of item response values for the three subscales: Cognition (COG), Arousal (ARO), and Behavior (BEH).

NAS Total raw scores. The raw scores from the NAS did not allow for clinical interpretation of the values but were utilized to produce descriptive statistics of the data, and statistical analyses. The pre-treatment and post-treatment raw scores were normally distributed in the sample (no significant skewness or kurtosis), and therefore, parametric analyses are used to explore research questions 1-3. All analyses are set at the .05 level of significance. Table 4 provides the mean and standard deviation statistics for the pre- and post-treatment subscale scores and the Total NAS scores.

Table 4

Means and Standard Deviations for NAS Total and Subscale Scores

	NAS Total		COG		ARO		BEH	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Mean	71.14	68.29	24.71	23.86	23.29	23.43	23.14	21.00
Std. Dev.	12.24	10.75	3.99	3.58	4.50	4.08	4.91	4.65

Note. $t(6) = .66, p = .533$.

A paired-samples *t*-test was conducted to compare participant pre-treatment anger disposition scores and post-treatment anger disposition (NAS Total) scores. The results indicated there was no significant difference between pre-treatment NAS Total scores ($M = 71.14, SD =$

12.24) and post-treatment NAS Total scores ($M = 68.29$, $SD = 10.75$), $t(6) = .66$, $p = .533$. These results suggest there was not a significant change in the participants' anger disposition after they completed the anger management program.

NAS *t*-scores. The NAS raw scores correspond to standardized *t*-scores for each scale. The standardized *t*-scores were obtained from the instrument scoring form. The *t*-scores have a mean of 50 and a standard deviation of 10. An area of treatment need is indicated with a *t*-score > 55 (more than half a standard deviation from the mean). Table 5 presents the participants' pre- and post-treatment *t*-scores for the NAS Total, and for subscales (Cognition, Arousal, and Behavior) used in calculating the NAS Total scores. Post-intervention decreases in COG, ARO, BEH, and NAS Total scores would be expected as a result of the effective therapeutic intervention.

Pretest scores. The pre-treatment NAS Total *t*-scores for the participants ranged from 34 to 58, with a mean of 43.9 ($M = 43.9$). The 43.9 mean score falls in the Low average range. The pre-treatment COG *t*-scores range from 35 to 61, with a mean of 44.3. The 44.3 mean score falls in the Low average range. The pre-treatment ARO *t*-scores range from 29 to 55, with a mean of 41.6. The 41.6 mean score falls in the Low average range. The pre-treatment BEH *t*-scores ranged from 40 to 61, with a mean of 47.7. The 47.7 mean score falls in the average range. Table 5.

Posttest scores. The post-treatment NAS Total *t*-scores for the participants ranged from 33 to 57, with a mean of 41.9 ($M = 41.9$). The 41.9 mean score falls within the Low average range for the NAS Total. The post-treatment COG *t*-scores ranged from 35 to 58, with a mean of 41.9 ($M = 41.9$) falling within the Low average range for Cognition. The post-treatment ARO *t*-scores ranged from 32 to 51, with a mean of 41.9 ($M = 41.9$), falling within the Low average

range for Arousal. The post-treatment BEH *t*-scores ranged from 33 to 58, with a mean of 42.7 ($M = 42.7$) falling within the Low average range for Behavior. Table 5.

Table 5

Participant Pre-treatment and Post-treatment NAS T-scores

Measure	Blake	Charles	Chris	Jason	Kyle	Matthew	Richard
Pre NAS	40	34	55	58 ^a	42	43	35
Post NAS	39	36	33	57 ^a	40	50	38
Change NAS	- 1	+ 2	-22^b	- 1	- 2	+ 7 ^b	+ 3
Pre COG	35	38	48	61 ^a	50	43	35
Post COG	35	40	32	58 ^a	45	43	40
Change COG	0	+ 2	-16^b	- 3	- 5	0	+ 5
Pre ARO	46	29	51	55	35	40	35
Post ARO	48	32	29	51	40	51	42
Change ARO	+ 2	+ 3	-22^b	- 4	+ 5	+11 ^b	+ 7 ^b
Pre BEH	42	40	61 ^a	58 ^a	44	49	40
Post BEH	34	40	40	58 ^a	40	54	33
Change BEH	- 8^b	0	-21^b	0	- 4	+ 5	- 7^b

NAS Total score (NAS); ARO = Arousal; BEH = Behavior; COG = Cognition;

^aIdentified as a treatment need if *t*-score > 55.

^bSignificant change identified by a *t*-score change > 5.

One individual (Jason) began the program with an overall pre-treatment NAS *t*-score that indicated a treatment need, and it remained a treatment post-intervention. His pre-treatment

subscale scores (COG and BEH) were also identified as areas of treatment need and remained as areas of treatment need when he completed the anger management program.

Quantitative Analyses

The preliminary analyses provided summary data necessary to begin the process of examining research questions 1-3. To answer the first three research questions, the researcher conducted a series of analyses examining relationships between variables. For each research question, the results of the analysis are provided first, then a summary result.

Research Question #1. “What is the relationship attachment, trauma, and treatment outcome?” In order to evaluate the relationship between attachment and treatment outcome, a repeated measures ANOVA was conducted on the pre- and post-treatment NAS Total scores, with the attachment style (secure vs. insecure) used as the between subjects’ factor. The results indicate there was no difference between pre-treatment scores ($\bar{x} = 71.14, s = 12.24$) and post-treatment scores ($\bar{x} = 68.29, s = 10.75$), $F(1,5) = 0.279, p = 0.620$, and there was no effect for attachment, $F(1,5) = 0.017, p = 0.962$. The results also indicate there was no interaction between the repeating NAS scores and attachment, $F(1,5) = 0.454, p = 0.53$. Figure 1 displays the distribution of pre- and post-treatment NAS scores by attachment style (secure vs. insecure).

**Pre- and Post- Treatment NAS score
Effect of security**

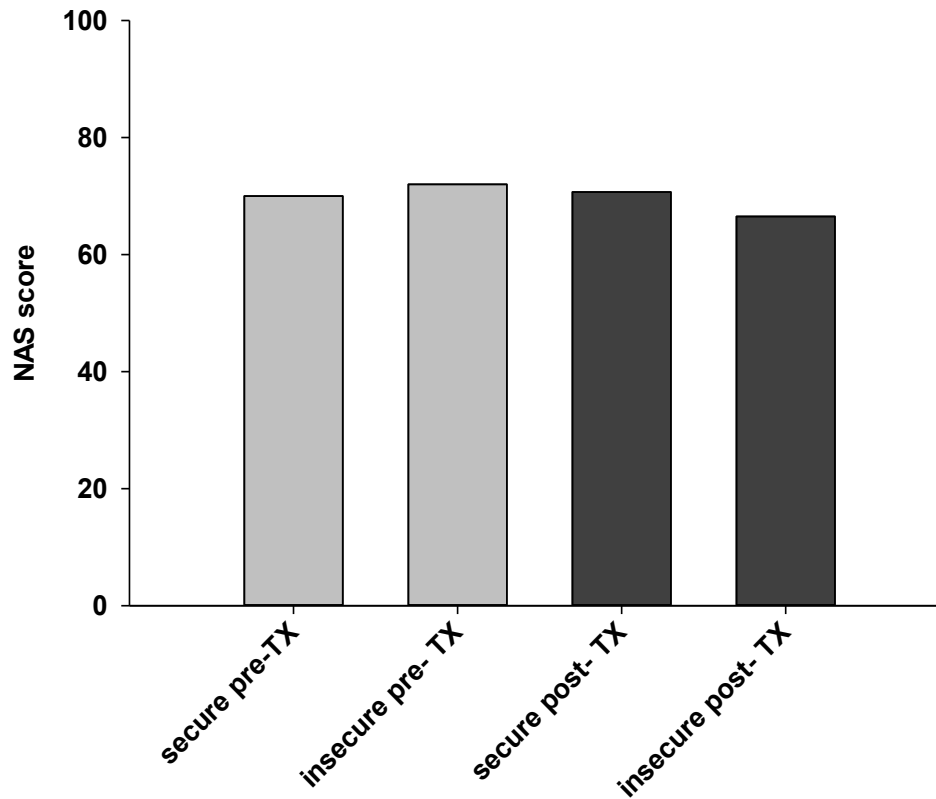


Figure 1. Distributions of the NAS scores by attachment style (secure vs. insecure). Data displayed are mean \pm SEM.

Next, to evaluate the relationship between trauma and treatment outcome, a repeated measures ANOVA was conducted on the pre-and post-treatment NAS Total scores, with the level of trauma (low vs. high) used as the between subjects' factor. The results indicate there was no difference between pre-treatment scores ($\bar{x} = 71.14, s = 12.24$) and post-treatment scores ($\bar{x} = 68.29, s = 10.75$), $F(1,5) = 0.441, p = 0.536$, and there was no effect for trauma, $F(1,5) = 0.034, p = 0.861$. The results also indicate there was no interaction between the repeating NAS

Scores and trauma, $F(1,5) = 0.159, p = 0.707$. Figure 2 displays the distribution of pre- and post-treatment NAS scores by level of trauma (low vs. high).

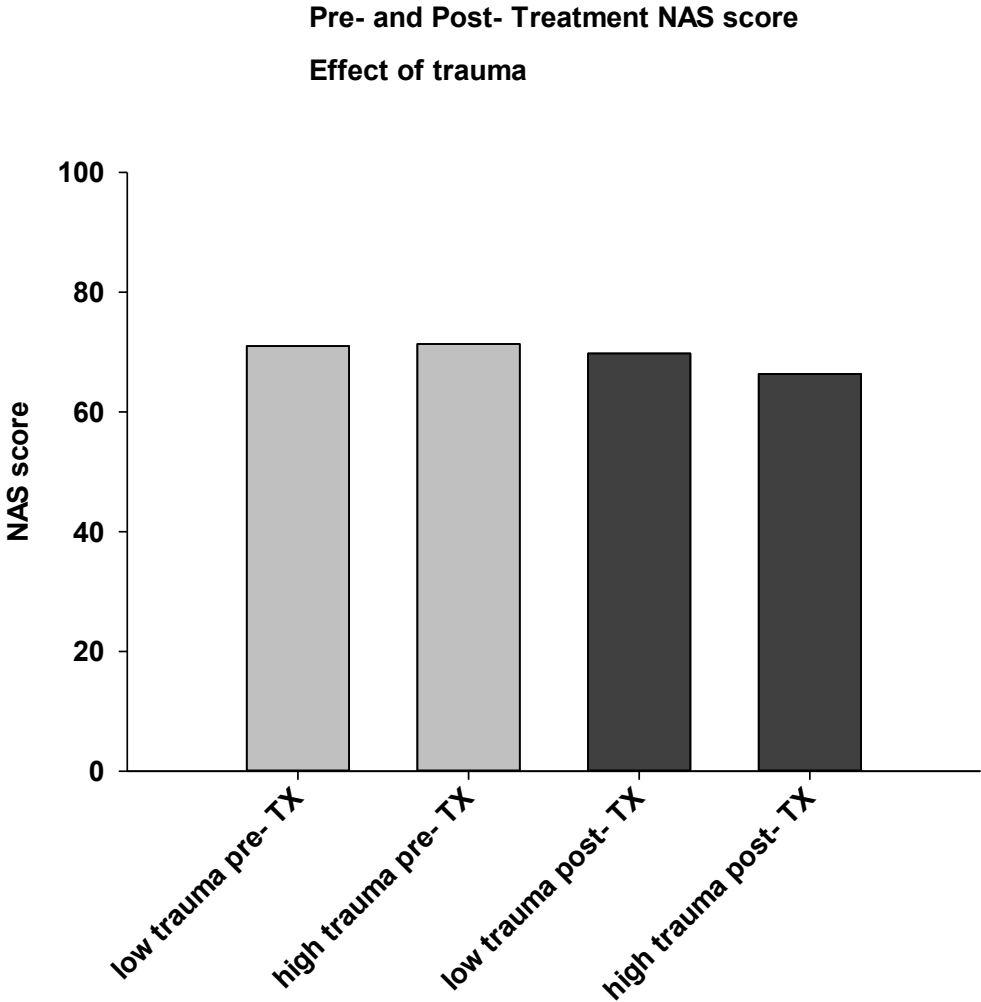


Figure 2. Distributions of the NAS scores by level of trauma (low vs. high). Data displayed are mean \pm SEM.

Result: The results suggest that treatment outcome will not differ among individuals with secure attachment and insecure attachment, nor will it differ among individuals with low trauma and high trauma histories.

Research Question #2. For research question #2, “Will individuals with an insecure attachment style present with greater difficulty in anger disposition?” an independent samples t test was conducted to evaluate whether pre-treatment anger disposition scores would be higher for insecurely attached individuals as opposed to individuals with secure attachment. The results indicate there was no difference in pre-treatment anger disposition between individuals with secure attachment, and individuals with insecure attachment, $t(4.70) = -0.18, p = 0.87$. Participants with insecure attachment ($\bar{x} = 72.00, s = 8.76$) did not have higher pre-treatment anger disposition scores than those with secure attachment ($\bar{x} = 70.00, s = 18.19$).

Result: There was no difference in pre-treatment anger disposition among securely attached and insecurely attached individuals.

Research Question #3. For research Question #3, “Will individuals with a history of trauma present with greater difficulty in anger disposition?”, an independent samples t test was conducted to evaluate whether pre-treatment anger disposition scores (PreNAS Total score) would be higher for individuals with high trauma scores (ACE ≥ 2) as opposed to individuals with low trauma scores (ACE < 2). The results indicate there was no difference in anger disposition scores between individuals with low trauma scores, and individuals with high trauma scores, $t(4.70) = -0.03, p = 0.98$. Participants with high trauma scores ($\bar{x} = 71.33, s = 12.66$) did not have higher pre-treatment anger disposition scores than those with low trauma scores ($\bar{x} = 71.00, s = 13.88$).

Result: There was no difference in pre-treatment anger disposition among individuals with low trauma scores and those with high trauma scores.

Qualitative Analyses

Research Question #4. “How does context inform the relationship between trauma, attachment, and treatment outcome?” As part of the process of understanding the relationships between the independent and dependent variables, qualitative data were also analyzed. The researcher conducted pre- and post-intervention interviews with the study’s participants.

Interviews were transcribed verbatim and uploaded to MAXQDA for coding and analysis. Directive content analysis, guided by existing theory, (Hsieh & Shannon, 2005) allowed for the development of first round coding of the first participant interview. First round codes were applied to subsequent interviews, allowing for exploration of similarities and differences in participant responses. This process led to the development of new codes and removal others until categories and commonalities among participant narratives emerged. As the categories and commonalities emerged, coding was then condensed and organized in such a way that the most common participant responses could be both well represented and summarized. This section reports the qualitative findings from the participants’ interview data. First, the reader will find themes from Entrance Interviews and then themes from the Exit Interviews. Extended quotes were provided in order to provide the reader with more of the behavioral, cognitive and affective aspects of participants’ responses.

Themes—Entrance Interviews. Semi-structured interviews (Entrance Interview) were utilized to obtain: 1) individual narratives regarding the context in which their offense behavior occurred, 2) participant pre-treatment level of anger awareness, 3) participant experiences of anger in the family of origin, 4) participant beliefs about primary caregiver dependability, neglect, and abuse, and 5) participant trauma history. The resulting themes are summarized in Table 6.

Table 6

Summary of Entrance Interview Responses

Study Concepts	Entrance Interview Question	Summary of Themes	Emergent Themes
Anger	Context of Violent Behavior	Goal of anger	Corrective measure Defensive response
		Source/Origins of anger	Dyscontrol acknowledged Dyscontrol denied Dyscontrol due to alcohol intoxication No similarity
	Similarity of offense behavior to FOO behavior		Similar to parental verbal aggression Similar to parental use of corporal punishment
		Angered behavior in FOO	Corporal punishment Verbal aggression Withdrawal
Trauma	Lifetime trauma	No Trauma	No traumatic experience
		Trauma—Harm Done to Others	Suicide/family member Death of close friend
		Trauma—Harm done to participant	Attempted suicide/self Childhood bullying Parental neglect or physical abuse Sexual assault
Attachment	Perception of primary caregiver		Favorable [No neglect; but harsh CP

Note: FOO = Family of Origin; CP = Corporal Punishment

Goal of violent behavior. When asked about the incident requiring attendance to the anger management course, participant responses varied in length and detail, however; all stories revealed that the offenses occurred during an escalated argument with a loved one (spouse, girlfriend, or stepdaughter) in the immediate family. Two themes emerged from participants' narratives of their offense behavior: 1) behavior that was provoked by and/or used to correct the misbehavior of the victim, and 2) behavior used to defend against the physical attack of their partner.

Corrective measure. Five individuals (71.43) explained their offense behavior as a response to the misbehavior of their victims. Provoked by the victim's behavior, the individual struck out in an attempt to take corrective action.

It was between me and my wife. Like any other couple argues. It was not the first time we argued. But she raised her voice at me in front of the kids, and that's not acceptable. She says she doesn't want to be two-faces. She thinks she should be herself in front of the kids. She thinks she should not act one way in front of them and another behind their backs. I just came home from work. She raised her voice at me and I raised mine back. I told her to lower her voice. She told me I cursed. She told me to get out in front of the kids. Then I slapped her in the face. (*Jason, 34-37 year old male, secure attachment, high average PreNAS-Total, 1 on ACE*)

I married her mom and then it was the typical stuff when you meet a woman with kids and they don't want you in that situation. They'll try anything. So you know, hey, I understand that. But the child, she's watching these shows on TV that, they're adult shows, you know, those reality shows, something they're not allowed on. . . . So I don't want her to watch, she's only thirteen. So I tell her, so she starts ranting and raving, and

you know, we've had problems with her hitting her Mom. She's hit me before, you know, I walk away, or I'll just leave, and go to my own house. I had my own house. But anyway, the child, she's ranting and raving, I'm like, (to wife) 'get your child.' And she's like, 'f**k you, this and that, and I never liked you, and this and that'. Then she swung at me and hit me. And so I'm just like, that's it. You know what I mean. And so she tried to run, and I went after her. You know, your gonna respect me and your Mom in this house. When I grabbed her, you know, umm, like hard . . . I was really embarrassed, you know, they came to my job, like two days later. They said that I shouldn't be grabbing the child, I shouldn't, you know, the child said I slapped her on the back of the neck. I may have, cause she needs it, you know what I mean. But, I learned that it's . . . you can't do that to kids any more. (*Charles, 50-53 year old male, secure attachment, low PreNAS-Total, 1 on ACE*)

Well, I threatened to kill her (spouse) with a gun. I went to look for her cause she wouldn't let me see my son. We had broke up and about two weeks later the dispute came. She wouldn't even tell me where she was. I didn't know where my son was. It was a couple days later that she reported it. (*Richard, 18-21 year old male, secure attachment, low PreNAS-Total, 2 on ACE*)

Two individuals reported their behavior as provoked by their partners, however, they attributed their behavior response to alcohol intoxication. Kyle explained that his violent reaction was due to his level of intoxication, and Chris reported having no memory of his violent behavior because of his alcohol intoxication.

I was off from my day of work and went out drinking all day and came home drunk, and I

tried to get in bed and smelled like beer and alcohol, and cigarettes. And my wife wasn't very happy with the fact that one, I had been out drinking all day, and two, that I came home late, and three, that I smell like beer and cigarettes. I tried to get in bed smelling like cigarettes, and she didn't want me to get into bed smelling like cigarettes. She told me to go sleep on the couch, or go sleep somewhere else, and I didn't want to cause I was drunk and stubborn, and tried to get in bed, and she tried to pull me out of bed, and the next thing you know all hell broke loose, really. I mean I just reacted, I didn't think about anything. I was drunk. I just got up and grabbed her and threw her on the bed, and she was screaming and I was screaming, and I liked grabbed her by the arm; grabbed her by her neck; held her down on the bed; told her to leave me alone, you know, there were some curse words in there, you know, etc., etc. I finally let her go. She got up, grabbed the kids, ran next door to the neighbors' house and during that time I passed out in bed. *(Kyle, 38-41 year old male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE)*

Um, me and my girlfriend got into a fight, an argument, and the neighbors called the cops ... Earlier that night, well, it was like a wild day. I went out. She went out with her friends. I went out with my friends. At the end of the night, well, we met up at the apartment. I don't know how we started arguing. We both had been drinking ... She said I pushed her and I slapped her, but I don't know, and that's why they charged me with assault. I don't remember that though. *(Chris, 22-25 year old male, dismissive-avoidant attachment, average PreNAS-Total, 3 on ACE)*

Defensive response. Two individuals explained their behavior as defending themselves against a physical attack made by their spouse. These two participants also reported that their spouses had a history of substance abuse. One of these individuals reported more than one instance of their spouse's physical aggression.

The police came three times actually...[Time #1] Uh, my wife, she likes pills, and she likes pain pills. And she used to have a real bad problem with crystal meth ... And she started getting worse and worse, and then you know, it would take a reality check to come back, and stop taking pills for a while. One of those was I dumped a pill bottle of hers in the toilet, and she punched me in the nose. And blood just exploded all over the bathroom, and I ran out of the house, and I got in my car and drove to (place of employment) to hide out ...[Time #2] Things escalated, and somehow a bat sittin by the front door got picked up and I got hit in the head. So I ran outside, and I'm afraid to go to the other side of the car to get in cause she's standing there with a bat. She's like go ahead, just leave, just leave. And I'm like fine, and I go around the car and I open the door, and she swings the bat into the windshield ... And I grabbed the bat and she's pullin on the bat and I'm stronger. And she loses her grip and like tug a war, she falls down, falls on her hand. Neighbors are like you hit her, you knocked her down. I'm like, my hands are up in the air, no I didn't. But whatever y'all want to say. [Time #3] She's like, I need the keys to go get cigarettes, and I'm like alright, and I tossed them. And she leaned into them and they cut her lip. Just a little knick on her lip. Cause she leaned into them cause she was too fucked up to catch them. And I didn't like baseball chunk them. I tossed them. And just the way she was sittin, and the way she leaned into them; a little

knick. *(Blake, 34-37 year old male, preoccupied-anxious attachment, low average PreNAS-Total, 1 on ACE)*

Ok, what led to the events that happened that night were, Friday morning...for years my wife and I had not been gettin' along . . . and, uhm, it got to a point where one Friday morning I wake up, and I'm gettin' ready for work. She wants to start a fight with me. She throws all my clothes out of the closet, off the chair, on the floor. Um, I said, like, "I'm not gonna fight with you." I threw my hands up. I surrender. I'm not gonna fight with you. I'm outta here. I leave and go to work. I come home at six that evening. I said, um, I paid some bills, did my runnin' around. I've always been Mister Mom to my kids ... Her son died of a heroine overdose. She's an ex-heroin addict ... That night at six o'clock in the evening she tried to start a fight. I told her I'm not fighting with you. I'm outta here. I left again. Um, and at three o'clock in the morning I came home ... Next thing I know, she comes barreling into the bedroom, screamin' at me, hollerin' at me, starting a fight. I was like, I don't want to fight with you ... And she grabs my cell phone . . . She threw my cell phone underneath the bed. I go underneath the bed to grab my cell phone and she knees me in the ribs, knocks me on the ground. She's on top of me, beatin' on me. . . I got a knot on my chest. Look at that. It was bigger when I went to jail, from her beatin' on me. The cops took pictures. She busted my frickin' eye open. Look at that. She busted my ear open. I was bleedin' and I tried to tell them it was self-defense . . . She came at me. I slapped her down. *(Matthew, 46-49 year old male, low average PreNAS-Total, 4 on ACE)*

Source/Origins of anger. Looking across the conversations around anger and angered behavior, it was clear that the majority of the participants did not associate their offense behavior with anger dyscontrol, or the angered behavior modeled in their family of origin. However, the issues of poor anger regulation, poor conflict resolution skills, and trauma emerged as significant factors in their lives and relationships. Exploration of participant anger focused on pre-treatment anger knowledge and self-awareness, and anger in the family of origin.

Pre-treatment anger awareness. To explore the participants' pre-treatment level of anger awareness, they were asked: "As you think about the incident you just described, do you think that difficulty in controlling your anger was what led to your behavior?" Two out of the seven participants came into the program with the understanding that their anger was a precursor to their offense behavior; one attributed his mandated participation to uncharacteristic behavior while under the influence of alcohol, and the remaining four participants did not believe they had any difficulty with anger control.

The two participants indicating awareness of anger as a problem stated, "I think so. But usually I always manage to walk away" (*Jason, 34-37 year old male, secure attachment, high average PreNAS-Total, 1 on ACE*); and, "Yes, anger was definitely an issue" (*Richard, 18-21 year old male, secure attachment, low PreNAS-Total, 2 on ACE*) Four participants believed that poor anger control was neither a problem, nor did it lead to their behavior during the incident. Matthew (*46-49 year old male, low average PreNAS-Total, 4 on ACE*) stated, "Not at all." Charles (*50-53 year old male, secure attachment, low PreNAS-Total, 1 on ACE*) explained, "I think it's just my upbringing, you know, you do wrong, you suffer the consequences. Now a days, it just don't ... you can't, you can't touch kids." Blake and Chris also denied having a problem with anger control.

No. No, I took the fall for her. I did it for us. I learned from her, you had to take it wherever you had to take. As far as ... you know, not everything is black and white. I was gonna show her what I was willing to do for the family. (*Blake, 34-37 year old male, preoccupied-anxious attachment, low average PreNAS-Total, 1 on ACE*)

‘Honestly, I don’t think it was, but, I mean, I don’t think it was. We’re both like the same way, like, she won’t stop and I won’t stop. And then we just get into it until like someone just says stop, or just walk away ... I don’t think I have an anger problem. Like for example when me and my girlfriend argue, I just walk away’. (*Chris, 22-25 year old male, dismissive-avoidant attachment, average PreNAS-Total, 3 on ACE*)

Kyle saw that alcohol intoxication led to his loss of control; and believed that anger dyscontrol was not characteristic of his usual behavior.

No. Well, difficulty because I was under the influence of alcohol. Had I not been so intoxicated, I probably, I know it would never have got there. So, I mean we would have argued but it would never have got to that extreme. (*Kyle, 38-41 year old male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE*)

Anger in the family of origin. Violence experienced or witnessed in the family of origin is both a source of trauma and an influential factor in the formation of attachment style and behavior. To explore familial models of anger and conflict resolution, participants were asked “As you think about the incident, would you say it is similar to the way the family you were born into handled anger?” Four participants clearly stated that they did not believe there was any

similarity between their offense behavior and the behaviors witnessed in their family of origin. Richard (18-21 year old male, secure attachment, low PreNAS-Total, 2 on ACE) responded with a simple “No,” and Jason (34-37 year old male, secure attachment, high average PreNAS-Total, 1 on ACE) stated, “No. My family ... my parents, they would have discussions. But you could tell they were having a disagreement.” Blake (34-37 year old male, preoccupied-anxious attachment, low average PreNAS-Total, 1 on ACE) stated, “No. My step Dad, his anger is like throwing the remote down and leaving the room. That was him cussing you out.” Kyle stated,

No, not at all. Absolutely not. I grew up in a good home. Like, I mean, don’t get me wrong, my parents had a little, couple of screaming matches here and there, but never violence. I didn’t grow up in a violent home at all. (Kyle, 38-41 year old male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE)

Three participants allowed for similarities between their behavior and the verbal aggression witnessed between their parents, as well as corporal punishment. Chris explained that his “screaming and yelling” was similar to his parents’ behavior, and stated:

Like when I was younger, I remember, yeah, my parents, like they would, like, yell and scream a lot. I used to hate that...and how, I used to hate it. That’s why, like when my girlfriend, when she yells, like screaming, I hate it. Like can you please just don’t yell. Cause I don’t yell, like I don’t like it, cause my parents use to yell and scream. I don’t like it. (Chris, 22-25 year old male, dismissive-avoidant attachment, average PreNAS-Total, 3 on ACE)

Charles (50-53 year old male, secure attachment, low PreNAS-Total, 1 on ACE) noted the similarity in his use of physical discipline with his stepdaughter, and explained, “It wasn’t about anger. My Dad didn’t discipline me because he was mad. You have to, just like in school,

the priest not mad at you. You did wrong, and this is what happens. Matthew, reflecting on the use of physical discipline in his family of origin as well, stated:

No. Well, my Dad and my sister got into shit cause she was datin' some hippie, redneck, beatnik back in them days. Umm, and he took my sister down at nineteen years old and spanked her ass, or something, eighteen, on the kitchen floor one time. But she was livin' in the basement and he was comin' over spendin' the night all the time. So I don't know. Was it justified? Probably so. Was he in the right? Probably so. But was it, well, I don't think he was outta line, and I don't think that what I did was outta line. (*Matthew, 46-49 year old male, low average PreNAS-Total, 4 on ACE*)

Pre-treatment exploration of anger in the family of origin continued with the question, "How did you know when someone was angry?" In response to this question, six out of seven participants reported they were slapped, spanked, or whipped with an object by their primary caregivers. Although corporal punishment was most common among the participants, no individual reported witnessing inter-parental physical violence. Participants continued to reflect on parental conflict resulting in behaviors such as withdraw and verbal aggression.

Chris (*22-25 year old male, dismissive-avoidant attachment, average PreNAS Total, 3 on ACE*) explained he knew his parents were angry "... because of the screaming and yelling. But I've never seen them, like, fighting physically. I've never seen that." Jason (*34-37 year old male, secure attachment, high average PreNAS-Total, 1 on ACE*) stated, "For us, I did get whipped. But it was discipline for a purpose. They didn't whip to release their anger. We always got whipped with a stick." The remaining participants also reported corporal punishment, parental withdrawal, and verbal aggression.

When they were angry I could tell, cause they wouldn't talk. It was my Mom and my Step-Dad. My Dad wasn't there. He was never there. I didn't have any contact with him. We did get spankings, but nothing abusive. (*Richard, 18-21 year old male, secure attachment, low PreNAS-Total, 2 on ACE*)

If my moms was mad, she would just like give you that look. And you knew ... my Mom told him (father), you know what I mean. You think you're slick, he gonna take care of it. And he came up in there and talked to me, and if I lied or tried to deny, or you know, you got a whoopin, that's what you got. (*Charles, 50-53 year old male, secure attachment, low PreNAS-Total, 1 on ACE*)

Usually when she gets upset or angry, she cries. She like cries herself to sleep. You know, she just gets upset and she starts crying. But if she's angry, like the last time I remember her being angry, she turned around and slapped me across the face. And I was like, I actually laughed at her, cause I thought it was hilarious that my Mom turned around and slapped me and I'm like twenty-five years old. (*Blake, 34-37 year old male, preoccupied-anxious attachment, low average PreNAS-Total, 1 on ACE*)

Uhm, my mom would just, you know, she would do her yelling, screaming ... We got spanked until you were old enough that they didn't hurt anymore, I mean, that's it. I mean, like the last time my dad spanked me it didn't do nothing to me ... So I mean it wasn't beatings or nothing like that. But I grew up in a small town in Texas, so I mean, if I didn't get spanked at my house, I got spanked at my best friend's house. So, and I still

believe in that. I still believe in spanking kids. (*Kyle, 38-41 year old male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE*)

They (parents) raised their voice and got loud. That's how I knew [they were angry]. They would fight, and they would fight, and they would argue all night long, cause my Dad was a drunk. (*Matthew, 46-49 year old male, low average PreNAS-Total, 4 on ACE*)

Trauma. To explore participant perceptions about past experiences of trauma, the individuals were asked, "Would you say you have experienced any event or events in your lifetime that could be described as traumatic?" Five participants (71.43%) reported, at least, one traumatic experience. Further exploration of the data revealed subthemes of harm to self and harm to others.

No Trauma. Only two individuals claimed to have never experienced a traumatic event. Jason replied with a simple "No," while Chris explained, "No, just this incident that happened. Going to jail. That's about the most traumatic thing."

Trauma—Harm Done to Others. Kyle reported the suicide of a family member, and the death of a close friend as traumatic events experienced in his lifetime. Charles reported the trauma of his mother's suicide.

Yeh, I lost my best friend when I was eighteen. That was like my first traumatic experience. He got killed, and he and I had been best friends. That and uh, uh, about 6 years ago I guess, my father-in-law committed suicide. So that was like the second biggest thing. So that was the start of, that was like the climax of the major issues between my wife and I. That just caused ... it destroyed our family. (*Kyle, 38-41 year old*)

male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE)

It's just, when my Mom, um, she always told me that the medication for the epilepsy at the time, it affected her, and she didn't like takin it. And when she, you know, committed suicide, that was traumatic (participant was in his 30's at the time). Yeh, but um, I understood that, like she always told me, she didn't like just existing. (*Charles, 50-53 year old male, secure attachment, low PreNAS-Total, 1 on ACE*)

Trauma—Harm Done to Participant. The greatest number of trauma experiences reported were events in which the participant was in some way harmed. Richard reported his attempt at suicide while others reflected on their childhood experiences of bullying (Blake), harsh physical discipline, attempted sexual assault, and being kicked out of his house at twelve years old (Matthew).

When I tried to kill myself. I shot myself in the stomach. We were in the relationship about two years, and we were arguing all the time. Yeah, my son was born when I was nineteen. He was two months old at the time. I was depressed cause nothing was goin' right. (*Richard, 18-21 year old male, secure attachment, low PreNAS-Total, 2 on ACE*)

I hated the bus, because I got into fights on the bus. The bus rides to school were terrible. I was picked-on on the bus. Not just by guys. There was a six-foot tall girl, senior I guess, she was giant next to me. I was little next to her and she picked on me every day. And there was nothing I could do about it. And that's verbal abuse to hear it every day, and have to deal with it because the bus driver's not going to do anything. (*Blake, 34-37 year*

old male, preoccupied-anxious attachment, low average PreNAS-Total, 1 on ACE)

1) Well, um, I had left home with the carnival when I was eleven, ten, eleven. I took off for the weekend, and thought it'd be like cool to go take off ... It's like you did one show a night, in one little town, and then you tear it down and drive to the next town. So this one carny guy says, "Hey ride with me. When we get to the next town, this and that. We got a hotel room instead of goin' and bein' with the rest of the carnies ... and he tried to make sexual advances on me. 2) I was, we were, I wouldn't say abused, but we were spanked for doin' wrong, you know ... My Dad put up a redwood fence in the backyard, which was very expensive. And we were out there karate kickin' the boards down and he came home. Chased us around the yard. With every other step we were kicked in the ass, you know. I feel like that was justified, you know. Um, today you go to jail for that shit, you know. Um, I don't know how you want to look at it. But I feel that it was justified that he would kick our ass for that ... Um, it still remains in my mind. You might call it traumatic, but it was still ... I deserved it. 3) And the same thing with being kicked outta the house at twelve. Um, so it was kinda traumatic, cause I was selling drugs to help my Mom out. When she found out what I was doin', how I was getting' money, she told me to quit, stop, don't do it. I don't want your dirty money kinda thing. Then I'd see her cryin' at the kitchen table cause she couldn't afford to pay the bills ... I was stubborn and boneheaded, young and stupid. I never went back. She ended up losing the house. She moved back to Washington State, and I didn't see her for another twenty years. So, you wanna call that traumatic? Yeah, maybe a little bit. (*Matthew, 46-49 year old male, low average PreNAS-Total, 4 on ACE*)

Childhood attachment experiences. In order to explore participant perceptions of their primary attachment figures, two pre-treatment interview questions focused on beliefs about their primary caregiver. Participants were first asked, “As you think about growing up, and the person that took care of you the most, do you feel that this person was someone you could depend on?” In all cases, the participants stated that they felt their primary caregiver was someone on which they could depend. Jason (*34-37 year old male, secure attachment, high average PreNAS-Total, 1 on ACE*) stated, “Sure. That would be my mother and father,” and Richard stated, “Yes. It was my mother.” Charles (*50-53 year old male, secure attachment, low PreNAS-Total, 1 on ACE*) responded, “Oh yeah,” and Matthew (*46-49 year old male, low average PreNAS-Total, 4 on ACE*) stated, “Yeah, yeah I could.” Chris (*22-25 year old male, dismissive-avoidant attachment, average PreNAS-Total, 3 on ACE*) stated, “Yes. It was my parents.” Blake (*34-37 year old male, preoccupied-anxious attachment, low average PreNAS-Total, 1 on ACE*) responded “Yes, I still can depend on them,” and Kyle (*38-41 year old male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE*) responded, “Absolutely. I can depend on them right now. That’s my mom and dad.”

To explore for attachment-related trauma (attachment injury), participants were asked, “Did you feel the person who took care of you was abusive or neglectful?” All cases stated that they did not feel their primary caregiver was abusive or neglectful. However, two participants (Matthew and Chris) reflected on the corporal punishment they received. Matthew (*46-49 year old male, low average PreNAS-Total, 4 on ACE*) stated, “No. Well, like I said, I, we were spanked. But I feel it was justified,” and Chris stated:

‘No, it was my parents. My mom, yeah, maybe a little bit. She would be more like, rough with me more, like, more tough love ... Yeh, I can remember that ... I remember one

time that my Mom did like spank me, like hard. My Dad got mad. So they started arguing. My Dad got mad, so I think it was a little too much. Like, she hit me with a belt. I still remember that. (*Chris, 22-25 year old male, dismissive-avoidant attachment, average PreNAS-Total, 3 on ACE*)

Themes—Exit Interviews. Semi-structured interviews (Exit Interview) were utilized to obtain: 1) post-treatment changes in participant anger knowledge and anger awareness, 2) specific knowledge gained from the program, 3) participant perspectives on the most helpful aspect of the program, and 4) participant perspectives about what helped to incite a change in their thinking. Table 7 provides a summary of the resulting themes.

Table 7

Summary of Exit Interview Responses

	Exit Interview Question	Emergent Themes
Treatment Outcome	Change in Anger Awareness	<ul style="list-style-type: none"> • Yes – Now understand anger dyscontrol to be a precursor (3) • No – Anger dyscontrol not believed to be a precursor (2) • No – Constant understanding that anger dyscontrol was a precursor (2)
	Knowledge Gained	<ul style="list-style-type: none"> • Physiological Arousal (3) • Arousal Reduction Skills (3) • Cognitive Processing (3) • Behavioral Skills (1) • Relational Skills (1)
	Most Helpful Aspect of Program	<ul style="list-style-type: none"> • Group Format – Hearing • Experience of Others (5) • Instructor Behavior (2)
	What Helped to Incite Change in Thinking	<ul style="list-style-type: none"> • Being Held Accountable by Criminal Justice System (3) • Gained Interpersonal Skill (1) • Humility and Gratitude (1) • No Change in Thinking (2)

Post-treatment changes in anger awareness. Participants were asked to reconsider one of the pre-treatment questions regarding anger control, and its relation to their offense behavior. Changes in thinking were explored with the question, “As you reflect on the incident for which you were required to take this anger management class, do you now think that difficulty in controlling your anger is what led to your behavior?” Three individuals did report a change in their thinking. Having entered the program believing that anger dyscontrol was not a precursor to their offense behavior, they acknowledged post-treatment that anger dyscontrol was a precursor to their behavior.

Yes, um, I feel that, um, I could have handled it a different way, you know. I’ve always disciplined my children, but this particular child, you ... now a days you can’t, you can’t discipline them. You have to talk to them. You have to go through counseling. You can’t put your hands on them, you know. And if they decide to call the police, it may anger me, but, you know. (*Charles, 50-53 year old male, secure attachment, low PreNAS-Total, 1 on ACE*)

Yes. Yeah, uh, thinking on it now, if I’d known how angry I was, and if I knew how to control my anger better, I probably wouldn’t have been in that situation at all. I would have been much better off having taken this anger management course in High School. This is supposed to be common knowledge. (*Blake, 34-37 year old male, preoccupied-anxious attachment, low average PreNAS-Total, 1 on ACE*)

Yes, I think so, because I could of, uh, done it differently. I could have walked away, but I didn’t. I continued to stay there. That’s one of the things I learned here...I guess take a

deep breath and like, just walk away, and come back when you're more calm. But I didn't do that. I just let anger get the best of me. Then the incident happened ... I regret it. *(Chris, 22-25 year old male, dismissive-avoidant attachment, average PreNAS-Total, 3 on ACE)*

Two participants (Kyle and Matthew) maintained they did not have difficulty with anger control. No, not at all. It was... It was things well before that night that led up to that thing. But marital problems and so many circumstances that had happened in our lives together that built up to that. Nothing to do with controlling anger. *(Kyle, 38-41 year old male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE)*

Um, I don't think it was ... well, she attacked me and she started beating me and I laughed at her. So, maybe I did it out of spite to make her mad, or to make her madder, I don't know. I really don't ... I'm really not an angry person in the first place. I'm not. *(Matthew, 46-49 year old male, low average PreNAS-Total, 4 on ACE)*

Two participants acknowledged, both before and after the treatment intervention, that difficulty with anger control did lead to their offense behavior. Jason *(34-37 year old male, secure attachment, high average PreNAS-Total, 1 on ACE)*

stated, "Somewhat. Sometimes I feel like I can control the situation, and sometimes I cannot."

Richard explained:

Well, yeah, I couldn't control it. Just, um, I was really impulsive. I just skipped the thinkin' part, you know. Like now I process my thoughts instead of ... back then I didn't process anything. I just reacted on my emotions. *(Richard, 18-21 year old male, secure attachment, low PreNAS-Total, 2 on ACE)*

Knowledge gained from treatment intervention. To explore specific areas of knowledge gained after completing the anger management program, participants were asked to “Please share three pieces of information you learned about your anger arousal from your attendance in the class.” Qualitative data revealed that the majority of the participants discussed awareness of their physiological arousal during an angered state, and techniques to self-calm, and reduce arousal. The majority of the participants were able to verbalize specific cognitive tools such as thought processing, and thought changing, as well as effective behavioral skills to implement during conflict resolution. Chris (22-25 year old male, dismissive-avoidant attachment, average *PreNAS-Total*, 3 on ACE) stated, “I try to ignore it (the situation), and I mean, if it don’t work, I walk away... I mean, I know I got to face it when I come back, but I’m more like, calm about it.” Other participants reported increased self-awareness of reactivity, as well as cognitive, and behavioral skills used to reduce anger arousal.

I could have controlled my reactions, rather than just riding her emotional craziness. It was more, you know, just reaction instinct. When she started yelling, I started yelling, because after five years, I was conditioned to have to yell over her interrupting. I was conditioned to just let it out as soon as I felt it, rather than think about what I was doing. (Blake, 34-37 year old male, preoccupied-anxious attachment, low average *PreNAS-Total*, 1 on ACE)

Um, I guess if I were to say three things maybe, just uh, just processing more I guess ... being more aware of what’s going on, with your surroundings and everything. Even before you get into it ... And if something does get to that point to where you will get angry, or potentially get angry, you know, actually just walking away, stepping away, or

you know, breathing techniques and stuff like that to calm yourself down. And just letting it go. Being able to just let it go. *(Kyle, 38-41 year old male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE)*

Like, um, well, a lot of things I just stop, if I feel myself getting' angry. I recognize my symptoms first, like if my muscles start getting' tight, you know. Like if my ears start getting a little red and hot, and stuff like that. So, I recognize that that's goin' on in my body. So, I'm like, oh, now I'm getting' mad, you know ... And the second thing I do is just like find some positive in the situation. You know, like try to find somethin' positive. And the third thing is just process your thoughts, you know, and try to change them. Like, put new thoughts in my head instead of what's goin' on. *(Richard, 18-21 year old male, secure attachment, low PreNAS-Total, 2 on ACE)*

Charles reported changes in his approach to parenting and his marital relationship.

Well, it's like he said (instructor), instead of it bein' you, you, sometimes you have to just look at yourself and learn how to skin a cat a different way . . . And it has helped me better with my ... dealing with my kids, you know. There's always another approach. The only approach bein' a Catholic school boy, or, you know, discipline, it's not always the way to go . . . I also learned how to deal with my relationship, me and my wife, you know. I always wanted to be the boss, you know . . . And a lot of times what I figured out is we may have different avenues to get to a point, but, you know, you have to be patient, and let my wife's point of view come out. And we'll try it her way sometimes, you know, and it's really... that's helped. *(Charles, 50-53 year old male, secure attachment, low PreNAS-Total, 1 on ACE)*

Jason and Matthew did not report a great deal of change or skills obtained from their attendance in the program.

Yeah, I feel like, everybody has the anger. Uh, it's best to have it under control. Um, for me, I think I somewhat have some type of anger, but I always manage to walk away from it. I don't think I cause any trouble. I think I'm an emotional guy, so this is, to me, I think it's normal. I don't ... I never hurt anybody because of my anger. I never made any bad decision because of it . . . It's just the situation that brought me here, cause my wife refuse to let me be on my own. Uh, in this class I've realized that a lot of people are having the same problem that I am having. I didn't realize it until ... compared to what I am to the rest of the people in the class, I think my anger is nothing compared to them.

(Jason, 34-37 year old male, secure attachment, high average PreNAS-Total, 1 on ACE)

I haven't really changed a lot since coming to this class. I don't know what I can say that I could actually pin point out of the class that I could say I could use in that text. Maybe that ... well I've always known that the separation thing, like whenever somebody wants to get aggressive or violent, you know, separate and walk away. That's one of the things. But I knew that before I got here. But they've re-instilled that. There's the cool off periods; separation time; come back and talk about it. A lot of times I'll just walk away and leave, or I'll get in the truck and leave. My wife gets mad, I'll get in the truck and leave. But when I came back we wouldn't talk about it. We wouldn't resolve the issue.

(Matthew, 46-49 year old male, low average PreNAS-Total, 4 on ACE)

Most helpful aspect of the treatment intervention. To explore participant perspectives on their experience in the program, individuals were asked “As you reflect on your experience in the class, what was the most helpful information you received? The majority (five out of seven) of the participants point to the group format as the most helpful aspect of the intervention. The participants reported the group program provided support, shared experiences, and modeling of behavior by the instructor as he interacted with group members.

Um, the most helpful information is just, the thought process, one thing, of course. And just (instructor), you know. Every time, like, you see a bunch of people who pretty much went through the same thing you did, and he just listened to their story. We sit around, like every week, they’ll bring up something, and just like havin’ that support in that group. (*Richard, 18-21 year old male, secure attachment, low PreNAS-Total, 2 on ACE*)

Well, not just this class, but all the classes, and everything I’ve gone through, I would say the most helpful in my particular experience with this whole thing, is other people’s experiences. Just learning from other people ... listening to their stories and hearing what they have to say, both good and bad ... Cause, you know, you got tons of different backgrounds and ethnicities ... So like really, some guys, you hear their stories, and your like ... I’m like, oh my God, really? You know, some of things I’ve heard and some of these guys, where they lived and where they come from ... it’s just mind blowing. (*Kyle, 38-41 year old male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE*)

Further exploration of the program impact was intended with the question “If there was a change in your thinking, what do you think helped?” Three out of the seven participants point to

the overall experience of being held accountable for their offense behavior by the criminal justice system as the true impetus for a change in their thinking.

I'll tell ya', goin' to jail and then comin' here, you have to ... my other two children, when I had to discipline them I disciplined them. When I spank them, I spanked them. Now a days, you can't do that anymore. (*Charles, 50-53 year old male, secure attachment, low PreNAS-Total, 1 on ACE*)

Well, what really helped is that, obviously, the amount of trouble I got into, you know. Like I think that I could of easily done somethin' worse, by the way I was. So, I had to just snap, you know ... Cause I could easily get outta jail and then go right back, if I don't change anything. (*Richard, 18-21 year old male, secure attachment, low PreNAS-Total, 2 on ACE*)

Taking responsibility for my actions. Cause when I first came here I was like, nah, I mean, it wasn't my fault. Then like after a few classes, I start thinking, well yeah, it was my fault. (*Chris, 22-25 year old male, dismissive-avoidant attachment, average PreNAS-Total, 3 on ACE*)

Blake reported learning about the importance of maintaining personal boundaries.

Boundaries. My first few classes here I discovered I don't have boundaries . . . the boundaries are I can't treat people like they're my family. Like I can't treat you like I would treat my Mom. I can't treat you like I treat my wife. Because I couldn't hold a

steady job until I was thirty . . . they just showed me that I didn't have them (boundaries), you know. I didn't even know what it was called. So that's what I figured out, cause common sense can only take you so far, you know. (*Blake, 34-37 year old male, preoccupied-anxious attachment, low average PreNAS-Total, 1 on ACE*)

Kyle reflected on his gaining a greater appreciation for life and the little things he previously took for granted.

Just . . . just humility. That's it. A total, I guess, wake up call . . . humility. It was a very humbling . . . that's what I learned. I learned how to be humble again. Not that I was on this pedestal or anything, or higher than anyone else. It 's just this overall appreciation of life, and all the little things that are . . . the little things you forget about, they're all really big to me now. Just simple things that we all take for granted. (*Kyle, 38-41 year old male, fearful-avoidant attachment, low average PreNAS-Total, 1 on ACE*)

Jason and Matthew report little change in their thinking after completing the program. Not to have any anger at all. What I say is just, this has been the best experience for me . . . I really think I don't have any anger thing. The anger that I had, the anger that brought me here, is just to me is, uh, everybody have. I'm human being. So, everybody have emotion, and this situation got escalated because I'll try to walk away and she won't let me. But, like I say, I do, I do think compared to everybody, to all my friends that surround me, that I hang out with, to my family, I think I have an anger problem compared to the people around me . . . But then compared to the people in this class, I'm nothing compared to them. From one to ten, I'm not even a one. So I don't think I have

any anger. (*Jason, 34-37 year old male, secure attachment, high average PreNAS-Total, 1 on ACE*)

Well, there really hasn't been a big change in my thinking. I don't know that, um...I don't know what would ... cause I really haven't changed a lot in my thinking. (*Matthew, 46-49 year old male, low average PreNAS-Total, 4 on ACE*)

Summary of Research Findings

Preliminary analyses. The preliminary analyses indicated that the four out of the seven participants (57.1%) were insecurely attached, and three participants (42.9%) were securely attached. All participants endorsed, at least, one adverse childhood experience (ACE). Of the participants reporting multiple ACE's, one individual (14.3%) endorsed 4 ACE's, one (14.3%) endorsed 3 ACE's, and one (14.3%) endorsed 2 ACE's. The results of the paired samples *t*-test indicated there was no significant difference between pre-treatment NAS Total scores ($M = 71.14, SD = 12.24$) and post-treatment NAS Total scores ($M = 68.29, SD 10.75$). Scores on the Novaco Anger Scale (NAS) indicated that six out of the seven participants (85.7%) had pre-treatment anger disposition scores in the non-clinical range (low to average range). Only one participant had a pre-treatment anger disposition score indicating a treatment need (t -score = 58), and along with his subscale scores for cognition and behavior, it remained a treatment need (t -score = 57).

Research Question #1. "What is the relationship between trauma, attachment, and treatment outcome?" The results of the repeated measures ANOVA, with attachment as the between subjects factor, suggest that treatment outcome will not differ among individuals with secure attachment and insecure attachment. No effect was found for pre-treatment vs. post-

treatment NAS Total scores, $F(1,5) = 0.279$, $p = 0.620$, and no effect was found for the level of attachment, $F(1,5) = 0.017$, $p = 0.962$. The results also indicate there was no interaction between the repeating NAS scores and attachment style, $F(1,5) = 4.54$, $p = 0.53$.

The results of the repeated measures ANOVA, with level of trauma as the between subjects factor, suggest that treatment outcome will not differ among individuals with low trauma and high trauma histories. No effect was found for pre-treatment vs. post-treatment NAS Total scores, $F(1,5) = 0.441$, $p = 0.536$, and no effect was found for level of trauma, $F(1,5) = 0.034$, $p = 0.861$. The results also indicate there was no interaction between the repeating NAS Scores and trauma, $F(1,5) = 0.159$, $p = 0.707$.

Research Question #2. “Will individuals with an insecure attachment style present with greater difficulty in anger disposition?” An independent samples t test was conducted to evaluate whether pre-treatment anger disposition scores would be higher for insecurely attached individuals as opposed to individuals with secure attachment. The test was insignificant, $t(2.70) = -0.18$, $p = 0.87$, at a the .05 level of significance. Participants with insecure attachment ($M = 72.00$, $SD = 8.76$) did not have higher pre-treatment anger disposition scores than those with secure attachment ($M = 70.00$, $SD = 18.19$). The results suggest that pre-treatment anger disposition will not greatly differ among individuals with secure attachment and insecure attachment styles.

Research Question #3. “Will individuals with a history of trauma present with greater difficulty in anger disposition?” An independent samples t test was conducted to evaluate whether pre-treatment anger disposition scores (PreNAS Total score) would be higher for individuals with high trauma scores ($ACE = / > 2$) as opposed to individuals with low trauma scores ($ACE < 2$). The test was insignificant, $t(4.70) = -0.03$, $p = 0.98$, at a the .05 level of

significance. Participants with high trauma scores ($M = 71.33$, $SD = 12.66$) did not have higher pre-treatment anger disposition scores than those with low trauma scores ($M = 71.00$, $SD = 13.88$). The results suggest that pre-treatment anger disposition scores will not greatly differ among individuals with low trauma scores and high trauma scores.

Research Question #4. How does context inform the relationship between trauma, attachment, and treatment outcome?" The qualitative data from the Entrance Interviews provided an expanded view of the environmental and situational factors surrounding participant offense behavior. Qualitative data obtained during the Exit Interviews facilitated a greater understanding of the treatment impact and allowed for alternative interpretations of treatment outcome.

Entrance Interview summary

Goal of violent behavior. It was significant to learn that all participant offenses occurred during an escalated argument with a loved one, and during an emotionally heightened state of arousal. This finding revealed that the violence occurred in an attachment relationship, and might be best understood from an attachment perspective.

The participants described their offense behavior as sudden, and reactive, with two themes emerging from participant descriptions: 1) behavior provoked by and/or used to correct the misbehavior of the victim, and 2) behavior used to defend against the physical attack of their partner. The qualitative data revealed significant situational factors that influenced the relational conflicts. Participants discussed long-standing relational conflict, blended family issues, offender alcohol intoxication, victim history of substance abuse, victim violent/aggressive behavior, and victim trauma history.

Source/Origins of anger. The participant narratives revealed that the majority of the participants began the anger management program believing that their anger dyscontrol did not

lead to their offense behavior. While two participants did acknowledge their angered state, and one individual explained that alcohol intoxication led to his loss of control, overall, the anger awareness and knowledge appeared to be low for this group. Additionally, the majority of the participants found no similarity between their offense behavior and the behavior modeled in their family of origin. Participants' narratives revealed that anger in their families of origin was largely characterized by verbal aggression, withdrawal, and corporal punishment. In fact, all participants reported some form of physical discipline. Overall, the participants believed their families were not violent, and they justified the corporal punishment received as an acceptable form of discipline, with references to cultural, and social acceptance. No individuals reported witnessing inter-parental physical violence.

Trauma. Overall, the qualitative data revealed trauma to be a salient issue among this population. Although two participants stated they had not had a traumatic experience in their lifetime, all other participants reported, at least, one traumatic event. The type of trauma discussed by the participants fell into two themes: 1) Harm done to others (family member suicide, the sudden death of a close friend), or 2) Harm done to the participant (suicide attempt, childhood bullying, harsh physical punishment, attempted sexual assault, and parental neglect and abandonment).

Childhood attachment experiences. The interview narratives revealed that all participants expressed generally favorable views of their caregivers. Each participant perceived their primary caregiver as dependable, and each stated that he did not feel his primary caregiver was ever neglectful. The majority of the participants reported their caregiver was never abusive, however, two participants did reflect on their experience of harsh corporal punishment.

Exit Interview Summary

Post-treatment change in anger awareness. The qualitative data illustrates that learning did occur for the majority of the participants. Three individuals reported a change in their thinking about their anger during the relational conflict. Each expressed that he could have handled the situation differently had he known how to control his anger better. However, not all individuals changed their minds about their anger dyscontrol. Two individuals maintained that anger dyscontrol was not an issue. While both of these individuals reported long-term, unresolved marital conflict, one maintained that he was defending himself, and the other pointed to the buildup of the marital problems that led to the conflict.

Knowledge gained from treatment intervention. Again, the exploration of knowledge gained during the program revealed that a great deal of learning did occur, but not for all participants. Three participants expressed an increased awareness of their physiological arousal, and the need for self-calming prior to conflict resolution. Most were able to discuss specific skills they learned, such as thought processing, thought changing, breathing techniques for reducing arousal, and behavioral skills to implement during conflict resolution. One individual did not discuss specific skills but reported overall changes in his approach to parenting and his marital relationship. Two individuals, one with the highest anger score, and one with the highest trauma score struggled to report areas of learning or change.

Most helpful aspect of the treatment intervention. Qualitative findings clearly point to the group format and the instructor of the anger management program as the most helpful aspect of the treatment intervention. The majority of the participants reflected on the behavior modeled by the instructor, the instructor's ability to engage with such a diverse group, and facilitate honest conversation. Participants appeared to benefit greatly from hearing the stories of others,

hearing different points of view, and having the support of fellow group members. As far as what helped to incite a change in thinking, three individuals pointed to the overall experience of being held accountable for their behavior by the criminal justice system. One individual reported gaining interpersonal skills from his group experience, and another reflected on learning humility and gratitude. Again, the two individuals with the high trauma and anger scores reported little change in their thinking.

Chapter 5

Discussion

This study used a mixed method, multiple case study research design to examine attachment style, trauma history, and treatment outcome among individuals attending a court-mandated anger management program. The mixed method study utilized both qualitative and quantitative data to understand the context, and explore the relationship between the study variables (attachment style, trauma history, and anger disposition). This chapter discusses findings and limitations; and then offers recommendations and directions for future research.

Research Questions

Primary research question. In order to fully address the primary research question, “How does context inform the relationship between attachment, trauma, and treatment outcome among violent offenders attending a group CBT-based anger management program?” it was necessary to examine, contrast, and compare the qualitative results with the quantitative components. Overall, participant narratives regarding family of origin context, and the context of their violent behavior proved to be essential for a richer understanding of the participants’ use of violence in a close relationship. The qualitative results provided the contextual information needed to interpret and analyze the profiles created by the quantitative findings, leading to alternative explanations for violent behavior, and alternative quantitative approaches. Convergent and divergent findings for the qualitative and quantitative components, and the questions that arise, are addressed in the subquestion findings, and summary.

It is important to note that the study’s ability to quantitatively measure and assess treatment outcome was greatly limited by the prevalence of non-clinical anger scores.

Researchers (Del Vecchio & O’Leary, 2004) have emphasized the importance of restricting meta-analytic reviews to studies demonstrating clinically significant levels of anger as evidenced by scores on standardized anger measures. Because of the low response to voluntary recruitment, the researcher was unable to restrict participation to individuals demonstrating high levels of anger disposition. Perhaps, those with higher levels of anger disposition self-selected out to the study for a variety reasons, including concerns about greater difficulty in presenting socially desirable responses, and incarceration for crimes involving more severe violence. However, obtaining the psychometric measure of anger did highlight the need for pre-treatment anger assessment. Similarly, obtaining measures of attachment style and trauma served to demonstrate the prevalence of insecure attachment and trauma history among the study population. Furthermore, the individual case explorations demonstrated that attachment style and trauma history may be important clinical entry points for understanding the violence that occurs in the absence of major difficulties with anger dyscontrol.

Research Question #1. The results of the statistical analyses exploring the relationships between participant attachment style, trauma history, and treatment outcome indicated that treatment outcome would not differ among individuals with secure attachment and insecure attachment, nor would it differ among individuals with low trauma and high trauma histories. Certainly the small sample size presents the problem of low statistical power, which reduces the chance of detecting a true treatment effect. Another reason for the lack of statistical significance may be that the average scores on the measures of anger disposition (pre- and post-treatment) were largely within a non-clinical range. These findings support those of previous research (Chambers, Eccleston, Day, Ward & Howells, 2008; Davey, Day, & Howells, 2005; Heseltine, Howells, & Day, 2010) in which forensic treatment populations evidenced normal or low levels

of anger. A predominance of non-clinical anger scores suggests that the majority of the participants did not experience major difficulties in regulating their anger. It is likely then that the predominance of non-clinical scores in this study may have diminished the treatment effects, and hence, the ability to detect relationships among the variables of interest.

The predominance of non-clinical anger disposition scores may also be an inherent vulnerability to reporting biases with self-report measures. Novaco (2003) warns that while low anger scores may reflect a relatively serene or tightly controlled emotional life, they can also reflect the “anger masking” response, or a defensive or otherwise distorted approach to responses to the NAS items. It is also reasonable to suspect response distortion among individuals with poor self-regulation skills, given they may be the least capable of self-monitoring or self-observation in the domain of emotional awareness (Novaco, 2003, 2010).

These findings highlight the importance and the complexity of assessing client anger. When the non-clinical anger scores suggest low anger awareness, this will likely correlate with a low motivation for change, and reluctance to engage in a treatment intervention aimed primarily at the reduction of anger (DiGiuseppe & Tafrate, 2001; Heseltine, Howells, & Day, 2010; Walker & Bright, 2009). However, when the non-clinical anger scores are understood to reflect low to average anger disposition, the question that arises is how to best treat those offenders whose violence occurs in the absence of major problems with anger regulation. While the Novaco Anger Scale addresses important dimensions of anger (cognitive, behavioral, and physiological), utilization of quantitative anger measures alone may not be sufficient to evaluate client needs. Walker & Bright (2009b) contend that a thorough evaluation will include not only self-report questionnaires, but also a clinician interview focused on the context of the of the target incident (background stressors, triggers, and antecedents). Similarly, Edmondson &

Conger (1996) suggest that an important first step in assessing anger problems is to assess the stimuli that provoke anger, as this may be an important source of differences between anger-prone and non-anger prone individuals.

Research Question #2. Results from the quantitative analysis revealed that individuals whose scores indicated insecure attachment did not present to the program with severe anger dispositions. In fact, only one participant began the anger management program with an anger disposition score in the clinical range (55 = High Average), and his scores on the ECR-R indicated he had a secure attachment style. Again, the small sample size and the predominantly non-clinical anger scores would explain the failure to demonstrate a statistically significant relationship between insecure attachment and treatment outcome. However, the quantitative findings indicated that the majority of the participants (4 out of 7) fell within an insecure attachment style. This finding parallels previous studies demonstrating that insecure persons are more likely to exhibit maladaptive and ineffective behavioral responses during anger episodes than secure persons (Bowlby, 1973, 1988; Babcock, Jacobson, Gottman, & Yerington, 2000; Kobak & Hazan, 1991; Mikulincer, 1998; Shaver & Mikulincer, 2007). As cited in Hazan & Shaver (1994), researchers (Feeney & Noller, 1990; Hazan & Shaver, 1987; Mikulincer, Florian, & Tolmacz, 1990) have demonstrated that secure attachment is the most common attachment style, accounting for approximately 55 percent of the general population, while approximately 25 percent of the population is categorized as avoidantly-attached, and 20 percent are found to have anxious attachment.

Adult attachment researchers have demonstrated that insecure attachment styles place these individuals at a high risk for relational conflict. Preoccupied/anxious individuals appear to have negative working models of themselves, and positive, yet guarded models of significant

others (Bartholomew & Horowitz, 1991). They see themselves as misunderstood and unappreciated, view others as undependable and worry that their partners do not truly love them (Hazan & Shaver, 1987). Negative affect and low levels of trust and satisfaction characterize their relationships (Simpson, 1990).

Adults with dismissing/avoidant attachment styles appear to have very poor conflict resolution skills. They exhibit positive views of self, but a negative, and often cynical, view of others. They tend to be emotionally distant and consider others to be unreliable (Bartholomew, 1990). Rholes, Simpson, and Stevens (1998) point out that dismissing/avoidant individuals are uncomfortable with intimacy, and minimize involvement in interpersonal conflicts, preferring to maintain a safe emotional distance from the partner and topic of disagreement.

Schachner, Shaver, and Mikulincer (2003) explained that fearful/avoidant individuals are likely to long for closeness and support while acting as if they do not want them. They describe this as a situation almost guaranteed to create problems in their relationships. Similar to preoccupied/anxious individuals, fearful/avoidant persons describe relationships with frequent negative affect (Simpson, 1990), lower levels of commitment, and interdependence (Collins & Read, 1990). The negative character of their relationships originates from an acute fear of intimacy (Rholes, Simpson, & Stevens, 1998).

Insecure individuals appear to be at higher risk of interpersonal conflict. It is likely then that during interpersonal conflict, insecurely attached individuals struggle with accurate interpretation and effective regulation of the negative affect associated with their internal working models. Screening for adult attachment style may serve to highlight possible underlying relational issues, and patterns of behavior. Increased awareness of the potential vulnerabilities associated with insecure attachment styles, may serve to increase participant insight into their

patterns of behavior, as well as their role in the relational conflict. Additionally, attachment style screening may provide useful information for the assessment of risk for future conflict between intimate partners.

Research Question #3. The results of the statistical analysis showed that the number of adverse childhood experiences did not predict the participants' anger disposition scores. In other words, participants endorsing adverse childhood experiences did not present to the program with greater difficulty in anger disposition. Again, the non-clinical status of this study population, as well as the small sample size, would certainly account for the lack of correlation between the variables of trauma and anger disposition. However, the results did confirm that all participants endorsed, at least, one adverse childhood experience.

More outstanding were the percentages of ACE categories endorsed by the study participants. In the seminal ACE study (Felitti et al., 1998) with over 17,000 participants (HMO member volunteers), the researchers found that 63% of the participants had experienced at least one category of childhood trauma. In the present study, 100% of the participants endorsed, at least, one ACE category. While the ACE study reported 28% participant endorsement for physical abuse, 15% for emotional neglect, and 23% for loss of a parent due to separation/divorce, the present study found a higher percentage of participant endorsement in these categories. The percentage of participants endorsing physical abuse was 43%, 29% for emotional neglect, and 43% for loss of a parent due to separation/divorce. The percentages found in the categories of emotional abuse (14%), sexual abuse (14%), household substance abuse (29%), and household mental illness (14%) were not significantly higher than those found in the ACE study (11%, 21%, 27%, and 19%, respectively). These results confirm the findings of previous research (Fergusson, Boden & Horwood, 2008; Hill & Nathan, 2008; Murrell, Christoff

& Henning, 2007; Widom & Maxfield, 2001) that there is a high prevalence of trauma among forensic populations.

Additionally, the findings support the contention that violent and aggressive behavior is associated with unresolved trauma (Dutton, 1999; Flemke, 2009; Menninger, 2007; Robins & Novaco, 1999; Van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Certainly, for those participants with the highest ACE scores (Matthew: 4, and Chris: 3), it is reasonable to suspect that the cumulative experiences of parental physical abuse, parental emotional neglect, loss of a parent due to divorce, and parental substance abuse influenced the development of their dismissive/avoidant attachment styles. Overall, these findings suggest that trauma screening may add much in the way of understanding violent behavior.

Research Question #4. From an attachment perspective, a significant finding was that for each participant, the violent offense occurred during an escalated argument with a loved one (girlfriend, spouse, or stepchild). It became clear that the collection of qualitative data offered the opportunity to explore maladaptive behavior and emotion regulation within an attachment relationship. The participant narratives provided a much richer understanding of violent behavior occurring among family members and partners.

Goal of anger. Overall, the participant narratives illustrate the challenge in understanding why individuals may resort to violence or aggression against their loved ones. The qualitative findings suggest that client interviews can reveal much about pertinent situational factors, and inform practitioners of the pressing issues requiring exploration during treatment. Common to all participants was their description of the offense behavior as a reactive response that occurred during a heightened emotional state, but with clear goals of either correcting the behavior of the other individual, or defending themselves against a physical attack. While their conversations

largely focused on justifying their behavior, they were perhaps more illustrative of the automatic behavioral repertoires of the family members or partners. The study findings support the contention that for some individuals, violent behavior can be a relatively thoughtless or impulsive reaction in which the decision-making processes involved in controlled information processing may be completely bypassed for automatic behavioral responses (Damasio, 1999; LeDoux, 1996; Siegel, 1999).

Feminists would assert that internalized patriarchy, with the accompanying issues of power and control, underlie automatic responses to gendered conflict. However, the case narratives in the present study are more reflective of violent behavior which serves the purpose of avoiding negative affect related to a sense of uncontrollability or vulnerability, as the individual chooses a fight, as opposed to flight, response based on biological factors (physiological arousal), and maladaptive behavioral patterns (Gardner & Moore, 2008).

The human drive towards attaching to another human being for safety, security, and protection appears to be a significant vulnerability for the formation of traumatic memories, and the development of maladaptive emotion regulation skills. A more comprehensive approach to emotion regulation deficits considers the potential for attachment injuries throughout the lifespan and the neurological pathways involved in the storing of trauma-related memories.

Sources/Origins of anger. Participants' responses revealed that the majority found themselves in anger management classes for reasons other than problems with anger dyscontrol. Four participants believed that their behavior was a justified response to the behavior of the other individual, and one participant saw that alcohol was a major contributor to his behavior. Even in the cases where participants allowed that anger dyscontrol was a problem at the time of the incident, overall they did not consider themselves as "angry" persons, or as having difficulty with anger control in general. These findings appear to parallel and reflect the predominance of pre-treatment, non-clinical anger disposition scores found in the quantitative analyses.

It was significant to find that all participants reported receiving some form of corporal punishment in their family of origin, and for two individuals, the corporal punishment was perceived as somewhat abusive. While there was no measure of the frequency or intensity of the physical punishment in this study, the use of corporal punishment was largely endorsed by the participants as an accepted discipline strategy. This finding demonstrates a predominantly ambivalent position towards corporal punishment, and a large disconnect for the majority of the participants, as they perceived little similarity between the corporal punishment they received and their offense behavior. Ambivalence towards corporal punishment may be fueled by the fact that it would require an individual to admit that one's parents did something seriously wrong, and the greater difficulty in acknowledging having disciplined one's children in a way that exposed them to the risk of negative outcomes (Straus, 1996). The general ambivalence might also explain how the striking of another individual was in the behavioral repertoire of the study participants.

In addition to corporal punishment, the qualitative findings revealed that most participants experienced parental conflict characterized by verbal aggression, and/or withdraw.

This finding suggests that parents struggling with their conflict resolution skills are likely modeling ineffective or maladaptive behavior for their children. It is also likely that the parent/child attachment relationship of individuals from chaotic and abusive families may not foster the development of adaptive affect regulation strategies, and in fact, promote poor affect regulation strategies (Dankoski et al., 2006).

Trauma history. The qualitative results largely converge with the quantitative findings regarding participant trauma history. These findings appear to support those of previous research demonstrating a strong relationship between trauma and aggressive/violent behavior (Dutton, 1999; Flemke, 2009; Menninger, 2007; Robins & Novaco, 1999; Van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). The participant narratives also revealed experiences of traumatic events that were not captured by the ACE Questionnaire. Childhood bullying at school, the death of a close childhood friend, and a suicide attempt were significant experiences reported, but not captured by the ACE screening instrument.

It was also significant to find that interview responses regarding trauma did not always converge with the data from the ACE questionnaire. Some participants endorsing items on the ACE questionnaire reported during their interview that they had not experienced an event in their lifetime that they would consider to be traumatic. Their ACE endorsements of physical abuse, emotional abuse, or emotional neglect would seem to suggest otherwise. These findings indicate that while childhood trauma may be prevalent among this population, the individual may not have identified, recognized, or resolved the trauma. It would follow that this would coincide with a lack of awareness of the impact that these adverse experiences may have on their current behavior in intimate relationships, as well their decisions in parenting practices.

Attachment style. Regardless of attachment style (secure or insecure) all participants reported that they perceived their primary caregivers as dependable except two participants reflecting on the harsh corporal punishment they received, all participants perceived their primary caregivers as never abusive or neglectful. Participant endorsements of a primary caregiver who is dependable, and sensitive to the need for safety, protection, and comfort, correlate with a secure attachment (Bowlby, 1988). Researchers have demonstrated that secure persons endorse more constructive goals and enacted more adaptive responses during anger episodes than did insecure persons (Mikulincer, 1998), and developed constructive approaches to problem solving (Shaver & Mikulincer, 2007). The questions that emerged were how to interpret the favorable endorsements of the primary caregivers reported by individuals with insecure attachment styles, and how to understand the violent behavior of securely attached individuals.

First, trauma researchers have pointed out that children are programmed to be fundamentally loyal to their caregivers, and have no choice but to organize themselves to survive within the families they have (van der Kolk, 2014). Fear increases the need for attachment, even if the source of comfort is also the source of fear. The inner maps or insecure internal working models tell these individuals that the poor treatment was not only acceptable parenting; it was somehow deserved. Therefore, regardless of the number of adverse childhood experiences, these individuals can reflect on their caregivers as never abusive or neglectful.

Another plausible explanation may be that for some individuals, their attachment style may be more reflective of the quality of the current relationship with their partner. Bartholomew and Shaver (1998) suggested that while adult attachment orientations have their roots in childhood experiences with caregivers, individuals move along increasingly differentiated developmental pathways toward or away from attachment security. In other words, when

experiencing events such as the death of a loved one, or the quality of a marital relationship, it is possible that the internal working models of romantic relationships may differ from internal working models of relationships with parents.

It would then follow that the understanding of violence between partners and family members may be enhanced by a focus on the characteristic behavioral patterns identified through attachment theory research. From this viewpoint, attachment styles can be conceptualized as a predictor of individual-couple dynamics, reflecting recent relationship experiences, or experiences specific to particular relationships (Shachner, Shaver, & Mikulincer, 2003). Attachment theory contends that different attachment styles represent differing intimacy needs, and differing strategies for affect regulation (Dankoski et al., 2006). For example, avoidant individuals uncomfortable with closeness and emotional vulnerability will likely trigger the behavioral strategies of an anxiously attached individual seeking closeness and closely monitoring the responsiveness of their partner for threats to the relationship (Simpson & Rholes, 1998). Therefore, the risk of future interpersonal conflict may best be predicted by assessing the attachment styles of each involved in the relational conflict.

Treatment outcome. Overall, the results of the qualitative analyses revealed that the cognitive-behavioral program did promote change in participant anger awareness and anger knowledge. These findings appear to help explain the increases and decreases observed in the participant anger scores as measured by the Novaco Anger Scale. As the quantitative data revealed, the participant scores were predominantly in the non-clinical range, and while expected to decrease post-intervention, some scores did increase. Novaco (2003) explains that low anger scores can be reflective of poor self-awareness and ability to articulate the experience of anger. During effective anger treatment, anger scores can increase as a function of the participants'

improved awareness, increased willingness to disclose anger, and greater ability to understand and articulate the experience of anger. Taken together, the quantitative and qualitative findings provide support for the position that brief anger-management programs may not lead to statistically or clinically significant improvements, although knowledge about anger and its effects do increase (Howells et al., 2005; Watt & Howells, 1999; Heseltine et al., 2010).

Contrary to the suggestion that the group format may not provide the optimal environment for anger-prone clients (Walker & Bright, 2009b), in addition to communications skills modeled by the instructor, the group format was largely endorsed by participants as the most helpful aspect of the program. This finding may be due to the instructor's expertise and communication skills, and/or ability to create a nonjudgmental environment for participants to share their stories and experiences. It appears that the open discussions during group format provided the members with ideas for choices, and perhaps a normalizing of the anger experience.

Summary

The study focused on trauma history, attachment style, and their relationship to anger disposition (treatment outcome) among individuals attending a CBT-based anger management program. The analyses of the results suggest that while trauma history and an insecure attachment style are likely to lead to the development of maladaptive behaviors, poor interpersonal skills, poor emotion regulation, and poor conflict management skills, they are not always associated with major difficulties in anger disposition. The findings suggest that insecure attachment and trauma are salient issues among men who are court mandated to attend anger management classes. However, the results also demonstrate that some trauma, especially meted out by one's primary caregivers, may not be recognized by the individual as a traumatic experience, and is, therefore, likely to remain unresolved.

The findings also suggest that the CBT-based intervention was successful in improving anger self-awareness, and anger knowledge, but not for all individuals. Effective CBT interventions are based on the client identifying anger as a personal problem and being committed to anger reduction (Deffenbacher, 2011). While the present study found predominantly low pre-treatment anger disposition scores for this sample and the majority of the individuals reported they did not have a major difficulty with anger dyscontrol, it is likely that, for some, treatment engagement in a program focused solely on anger reduction was low. Furthermore, for those cases in which the offenders were reportedly attacked by their partners, the offender may initially have a very a low motivation for behavior change. Novaco (2010) explained that treatment providers often mistakenly label these individuals as “treatment resistant.” Issues of low motivation and low treatment readiness will likely stand in the way of therapeutic change (Howells et al., 2005).

The study findings suggest that assessment of attachment style may assist in identifying patterns of behavior keeping these individuals at high risk of continued relational conflict. Attachment assessment may be most beneficial when both individuals involved in relational conflict can be assessed. The results revealed that offenders and their partners were in an emotionally aroused state at the time of the target offense, with some partners also engaging in maladaptive and/or violent behavior. With this information about the conflict, the offense behaviors may be best understood from the viewpoint of the partner violence typologies described by Kelly and Johnson (2008). Conflicts in which both partners demonstrate poor emotional regulation, and poor conflict resolution skills, are categorized by Kelly and Johnson (2008) as Situational Couple Violence. Situational Couple Violence is characterized by violence that 1) results from situations or arguments between partners that escalate on occasion into

physical violence, 2) is perpetrated by both men and women, and 3) has a lower per-couple frequency of occurrence. It is differentiated from the Coercive Controlling Violence typology characterized by a pattern of power and control more frequent and severe than other types of intimate partner violence. Kelly and Johnson (2008) explained that during Situational Couple Violence, one or both partners appear to have poor ability to manage their conflicts and/or poor control of anger. The participant narratives highlight the need to consider the interpersonal dynamics of conflict management.

While not offered as an excuse for offender behavior, the qualitative findings also reveal evidence of violent or aggressive behavior perpetrated by the victims of the target incident. Participants reported partner behavior such as physically pursuing and grabbing the offender while in an angered state, and physically attacking the offender. Kelly and Johnson (2008) explained that although the viewpoint may be controversial, the reality is that both men and women are violent in intimate partner relationships. They refer to this pattern of interaction as Violent Resistance, in which men and women may resort to a self-protective violence.

For this population, demonstrating a higher percentage of non-clinical anger dispositions, the partner typologies provide a lens to understand better the use of violence between intimate partners. It appears that understanding the context of violent behavior may serve to highlight the major issues placing these couples at high risk for future violence. This result suggests that differentiating among types of partner violence might be most beneficial in determining effective treatment approaches for this population. It also suggests that treatment providers might consider couples counseling as an alternative or adjunct treatment to traditional anger management programs.

The analyses also suggest that the use of corporal punishment in the family of origin might have provided a model of what to do when someone misbehaves (Strauss, 1996), and therefore, participant misbehavior was not likely to have been met with positive parenting practices, such as parental support, warmth, and use of reasoning (Gamez-Guadix, Straus, Carrobes, Munoz-Rivas & Almendros, 2010). Straus (2008) contends that corporal punishment is the primordial violence because being hit by parents is almost always a child's first experience with violence. Corporal punishment teaches each new generation that violence is a socially legitimate behavior (Straus, 2008), and it has been identified as a major risk factor for physical abuse of partners in a relationship (Gamez-Guadix et al, 2010). The participant ambivalence towards corporal punishment may be fueled by the tendency to idealize parents, and the difficulty in admitting exposing one's children to high risk, adverse experiences (Straus, 1996).

The participant narratives revealed many of the long-term effects associated with witnessing parental conflict such as approach-avoidance patterns of conflict, anxiety over partner availability or abandonment, negative beliefs about the relationship, frequent fighting (Henry & Holmes, 1996), as well as emotional reactivity (Cummings & Davis, 2010). Collectively, these findings highlight the importance of helping clients connect their family of origin experiences of anger and poor emotion regulation to their current interpersonal difficulties. Implementation of attachment assessment and attachment curriculum may best educate clients on the predictable trajectory for the development of these maladaptive skills. Perhaps this increased understanding will also serve to improve client motivation to change those behaviors that will place their children at risk.

A significant finding from the analyses of the Exit Interviews was the absence of conversations regarding the impact of violence on children. Although all participants reported

children present in their homes, no individual mentioned their children as motivation for behavioral change. Throughout the post-treatment interviews, no individual expressed an awareness of the impact of inter-partner aggression or violence on children. Based on the participant narratives, the motivation for a change in their thinking was largely attributed to their desire to avoid future encounters with the criminal justice system. These findings suggest that while one partner may refrain from inter-partner violence, high-risk parental behaviors (verbal aggression, withdrawal, physical discipline) are likely to continue. The question arises whether a focus on their children and the risks associated with exposure to aggression, violence, and corporal punishment may serve as a primary motivation for behavior change among this population. For those participants reporting little change in their thinking or behavior after completing the program, a focus on breaking the cycle of violence, and the well-being of their children may have made the difference.

Study Limitations

While the study has contributed constructive findings pertaining to the assessment and treatment of individuals in an anger management program, it had several limitations. First, the small sample size did not provide adequate power to identify significant relationships among the variables of interest. However, the goal of the present study was conceptual generalization, and the usual analytic technique of obtaining large numbers of participants and a small number of variables is irrelevant to the multi-case design (Yin, 2013). The small size and demographic makeup of the sample (100% male) also limited the ability to generalize the findings beyond the sample in this study. Second, the treatment outcome measure was limited to only a pre- and post-treatment assessment. A follow-up on the lasting effects of the treatment intervention and recidivism rates would be of interest to the courts. Also, a particular problem with this

population is the possibility of social desirability. Factors influencing the psychometric scores, including motivation, honesty, and self-insight suggest that there are difficulties in assessing change through self-report measures. Self-awareness for this population is likely to be low, and fear of legal repercussions may keep them from honestly reporting. Although the participants were assured of the confidentiality of their responses, the lack of therapeutic alliance with the researcher may have had more impact on their honesty. Because the study sample was composed of volunteer participants, it is possible that these individuals differ from those in the anger management program who did not offer their participation. Finally, because of the small sample size, and the study design, conclusions regarding causality among the study variables cannot be determined. Despite the study limitations, the results present interesting implications for the treatment of individuals with anger related problems, as well as for future direction of research in this field.

Implications

Implications for future research. The findings of the present study point to the need for continued research in community-based anger management programs. Further investigation with larger samples will help clarify the relationship that may exist between trauma, attachment, and treatment outcome. It may be prudent for treatment providers to track these variables among their clients on regular basis. The present study found a lack of awareness regarding the impact of violence on children. Future should studies explore how providing this educational component might impact treatment engagement and motivation for behavior change. The present study demonstrated the usefulness of implementing participant interviews in order to fully understand the use of violent or aggressive behavior. Future research utilizing the mixed methods

design (qualitative and quantitative) may further our understanding of the use of violence, the risk factors, as well as the protective factors among this population.

Implications for treatment providers. From the perspective of the criminal justice system, a cognitive behavioral therapy-based anger management program is effective for providing a group-based anger management education. There is evidence that the group program supported participant self-awareness and knowledge of anger arousal, and taught both cognitive and behavioral skills for the reduction of anger arousal, and effective conflict resolution. However, it was also clear that learning did not occur for all participants. Based on the study findings, it can be argued that not all individuals mandated to attend anger management programs will have severe difficulty with anger regulation, but may have other risk factors such as insecure attachment, partner insecure attachment, and trauma history putting them at risk for future relational conflicts. More importantly, insecure attachment and trauma were prevalent among this population, suggesting that there may be salient issues in the etiology and maintenance of maladaptive behavior. The findings also suggest that a desire to avoid future costly encounters with the legal system will likely keep the probationers from hitting, slapping, kicking, or pushing their partners. However, from a family systems perspective, the findings indicate that an educational component in parenting skills may best serve the goal of stopping the intergenerational transmission of violence.

When violent behavior is best categorized as situational violence, in which it is likely that both partners have a poor ability to manage relational conflict; or violent resistance, some couples will be at high risk for continued relational conflict when only one member of the dyad is working on changing their behavior. Again, considering the family system and the well-being of the children, it appears that some cases of violent behavior might best be addressed during a

couples' intervention. Couples therapy may be the greater need and provide the best outcome for all family members, especially in the cases where female spouses demonstrate violent behavior.

It is important to note that all participants reported the presence of children in their household, and some reported children present at the time of the target offense. As the findings demonstrate a general ambivalence towards corporal punishment among the participants, it is reasonable to conclude that physical discipline of their children will likely continue. As stated previously, the use of corporal punishment teaches each new generation that violence is a socially legitimate behavior. The use of corporal punishment puts children at risk for the development of poor affect regulation strategies, aggression, and insecure attachment. The concern is not only the increased likelihood that these children grow into adults who condone corporal punishment, but that they are also at risk of developing into adults with insecure attachment styles, which then places them at risk for high conflict in their intimate relationships. So the cycle continues.

These findings, taken together with the finding that participants made little connection between their maladaptive behavior, and angered behavior modeled in their family of origin, strongly implicates a need for CBT-based anger management programs to implement parenting education into their curriculums. However, more than instruction on positive parenting approaches, the curriculum should include a focus on the risk of long-term negative effects from childhood exposure to corporal punishment, and parental aggression and violence. Implementing attachment education may be the best chance for facilitating a connection between family of origin experiences, and the automatic behavioral patterns present in their high conflict relationships. Education on attachment might also be the best chance for facilitating changes in

parenting approaches, and for the development of secure attachment relationships with their children.

Currently, anger management programs are not required to assess anger levels, nor are they required to measure treatment outcome. The study findings implicate a need for treatment providers to distinguish between anger-prone and non-anger prone individuals. The findings illustrate that individuals can find themselves in the criminal justice system for multiple reasons other than having a major difficulty with anger regulation. Although anger assessment instruments, such as the Novaco Anger Scale, may present the practitioner with challenging interpretations of the self-reported experiences of anger, the instruments can assist in 1) determining the client's level of self-awareness or knowledge of anger arousal and angered behavior, 2) provide a baseline to measure post-treatment change, and 3) bring the practitioner's attention to factors other than anger dysregulation that may be associated with the offense incident.

As illustrated in the participant narratives in this study, the path to violent behavior is complex. Overall, the findings support the contention that while anger management may play an important role, referrals and other interventions may be necessary for some individuals presenting to an anger management program (Deffenbacher, 2004). A comprehensive assessment which includes exploration into the context of the violent or aggressive behavior, a screening for attachment style, and a screening for client trauma history may illicit information rich in clues for improved treatment engagement, motivation for behavior change, and choice of treatment approach. This is not to say that CBT-based interventions would not be helpful, or that anger-prone individuals will not benefit from them. However, the findings suggest that a comprehensive assessment may lead to consideration of alternative or adjunct interventions. It

may behoove the courts to require such assessments, and consider the use of mandated couples counseling when appropriate.

Implications for the field of marriage and family therapy. Overall, the study findings highlight the usefulness in assessing attachment style and trauma history when treating violent, angered behavior. Assessment of client and partner attachment style can aid in making sense of relational patterns that keep individuals in constant conflict, and generate distress in families seeking therapy. Attachment theory can inform traditional behavioral models and interventions, and help explain why people behave the way they do in relationships (Davila, 2003). As demonstrated in the present study, adult insecure attachment styles may reflect the current quality of the relationship, and serve as a screening measure for the risk of continued relational conflict.

The present study also provided evidence for the need to screen clients for trauma history. The study demonstrated that some individuals fail to recognize adverse childhood experiences as traumatic events. Moreover, individuals may fail to make a connection between these traumatic experiences and their current behavior in their close relationships. Trauma screening will then serve as an entry point into making sense of maladaptive behavior, and assist in treatment planning. It is likely that many behavioral issues seen in the therapy room have their roots in trauma, which the client has not fully identified or resolved.

Additionally, the study findings suggest that marriage and family therapists have much to offer in the treatment of violent offenders. Ultimately, treatment interventions for this population will be aimed at breaking the cycle of violence in the families of this forensic population. Marriage and family therapists can be essential in expanding not only the assessment of the individual but also the assessment of the dyad and the family system. While anger management

programs may be beneficial for individuals, couples therapy may be the greater need and provide the best outcome for all family members. Designing treatment interventions with a family systems perspective might also serve to better engage clients who present with non-clinical anger levels.

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Appendix A

Entrance Interview Guide

Thank you for your participation in my study. We will discuss only the case that has been adjudicated by the court. I will address you only by the false name that you selected. I would also like to remind you not to use any real names in your answers to my questions, but only identify the relationship of other individuals you mentioned (e.g., father, son, aunt, friend, sister).

If during our interview you disclose abuse of a child, disabled person, or elderly person, I will have to stop the interview. I will also have to report that information to law enforcement.

I will be asking questions about your past experiences that may bring up negative and disturbing emotions. You may stop the interview at any time, and choose to proceed at a later time, or choose to withdraw from the study. In the case that uncomfortable emotions occur and continue for you, I will give you the name of the contact person in the agency providing the anger management program for further assistance.

If you are comfortable continuing the interview, we will discuss the items on the Adverse Childhood Experiences (ACE) questionnaire first, and then continue with questions about your offense, anger experiences in your past, anger in your family, your experiences of trauma, your experience with your primary caregiver, and the times you were successful in handling your anger.

1. Please describe the incident for which you have been adjudicated and required to take an anger management class (offense, victim, events surrounding the offense).
2. As you reflect on the incident just described, do you think that difficulty in controlling your anger was what led to your behavior?

3. As you think about the incident you just described, would it be reflective of the way the family you born into handled anger? How did you know when someone was angry?
4. Would you say you have experienced any event or events in your lifetime that could be described as traumatic? Be sure to consider your entire life, growing up as well as adulthood. Please keep in mind that you only need to share what you feel comfortable sharing. If yes, please explain.
5. As you think about growing up, and the person that took care of you the most, do you feel that this person was someone you could depend on? Please keep in mind that you only need to share what you feel comfortable sharing. If no, in what ways were they not dependable?
6. Did you feel the person who took care of you was abusive or neglectful? Again, I will remind you that you only need to share what you feel comfortable sharing. If yes, how were they abusive or neglectful?
7. How have you handled anger successfully in the past?

Appendix B

Exit Interview Guide

Thank you for your participation in the Exit Interview of my research study. I would like to ask you some questions about your experience in the group anger management program. Please remember that you may stop the interview for any reason.

We will discuss only the case that has been adjudicated by the court. I will address you only by the false name that you selected. I would also like to remind you not to use any real names in your answers to my questions, but only identify the relationship of other individuals you mentioned (e.g., father, son, aunt, friend, sister).

If during our interview you disclose abuse of a child, disabled person, or elderly person, I will have to stop the interview. I will also have to report that information to law enforcement.

1. As you reflect on the incident for which you have been adjudicated and required to take an anger management class, do you now think that difficulty in controlling your anger is what led to your behavior?
2. Has anger control been a problem for you currently? If so, please explain.
3. Please share three pieces of information you learned about your anger arousal from your attendance in the group anger management program.
4. As you reflect on your experience in the group anger management program, what was the most helpful information you received?
5. If there was a change in your thinking, what do you think helped?
6. Most recently, how have you handled your anger successfully?

This completes the Exit Interview, and ends the data collection process. I would like to remind you that when you leave here today, your false name will be removed from your data and

given an identification number. I will then have no way of identifying which data belongs to you. At this time I will ask if you would like to voluntarily withdraw your data from use in my research study?

I would also like to remind you that in the case that uncomfortable emotions occur and continue for you, I will give you the name of the contact person in the agency providing the anger management program for further assistance.

Appendix C
Demographic Information Form

Pseudonym: _____

Please complete the following questions.

1. Age: _____

2. Gender: _____ (male/female/transgender)

3. Race/ethnicity: _____

- a. Asian
- b. American Indian or Alaskan Native
- c. Black or African American
- d. Hispanic or Latino
- e. Native Hawaiian or Other Pacific Islander
- f. White

4. What is your marital status? _____
(single, married, living together, separated, divorced, other)

5. How many children are in the household? _____ How many are your biological children? _____

Appendix D
Experiences in Close Relationships-Revised (ECR-R)
Adult Attachment Questionnaire

The statements below concern how you feel in emotionally intimate relationships. I am interested in how you *generally* experience relationships, not just in what is happening in a current relationship. Respond to each statement by circling the number (numbers 1 through 7, with 1 indicating you Strongly Disagree and 7 indicating you Strongly Agree to indicate how much you agree or disagree with the statement.

- | | | | | | | | |
|--------------------------|---|---|---|---|---|---|-----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Strongly Disagree | | | | | | | Strongly Agree |
1. It's not difficult for me to get close to my partner.
 2. I'm afraid that I will lose my partner's love.
 3. I worry a lot about my relationships.
 4. When my partner is out of sight, I worry that he or she might become interested in someone else.
 5. I prefer not to show a partner how I feel deep down.
 6. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
 7. My romantic partner makes me doubt myself.
 8. I feel comfortable sharing my private thoughts and feelings with my partner.
 9. I find it difficult to allow myself to depend on romantic partners.
 10. I often worry that my partner doesn't really love me.
 11. I am very comfortable being close to romantic partners.
 12. I find that my partner(s) don't want to get as close as I would like.
 13. I don't feel comfortable opening up to romantic partners.
 14. Sometimes romantic partners change their feelings about me for no apparent reason.
 15. I prefer no to be too close to romantic partners.
 16. I often worry that my partner will not want to stay with me.
 17. I get uncomfortable when a romantic partner wants to be very close.

Appendix E

Adverse Childhood Experience (ACE) Questionnaire

1. Did a parent or other adult in the household **often or very often**...
Swear at you, insult you, put you down, or humiliate you?
or
Act in a way that made you afraid that you might be physically hurt?
Yes or No If yes enter 1 _____

2. Did a parent or other adult in the household **often or very often**...
Push, grab, slap, or throw something at you?
or
Ever hit you so hard that you had marks or were injured?
Yes or No If yes enter 1 _____

3. Did an adult or person at least 5 years older than you **ever**...
Touch or fondle you or have you touch their body in a sexual way?
or
Attempt or actually have oral, anal, or vaginal intercourse with you?
Yes or No If yes enter 1 _____

4. Did you **often or very often** feel that...
No one in your family loved you or thought you were important or special?
or
Your family didn't look out for each other, feel close to each other, or support each other?
Yes or No If yes enter 1 _____

5. Did you **often or very often** feel that...
You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
or
Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
Yes or No If yes enter 1 _____
6. Were your parents ever separated or divorced?
Yes or No If yes enter 1 _____
7. Was your mother or stepmother...
Often or very often pushed, grabbed, slapped, or had something thrown at her?
or
Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?
or
Ever repeatedly hit at least a few minutes or threatened with a gun or knife?
Yes or No If yes enter 1 _____
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
Yes or No If yes enter 1 _____
9. Was a household member depressed or mentally ill, or did a household member attempt suicide?
Yes or No If yes enter 1 _____
10. Did a household member go to prison?
Yes or No If yes enter 1 _____

Appendix F

Novaco Anger Scale (NAS)

Directions:

The statements below describe things that people sometimes think, feel, and do. How true are they for you?

For each statement, indicate whether it is: 1) never true, 2) sometimes true, or 3) always true. In the box to the left of the statement, indicate the number that best describes how true the statement is for you.

(1) Never True **(2) Sometimes True** **(3) Always True**

1. When something wrong is done to me, I am going to get angry.
2. Once something makes me angry, I keep thinking about it.
3. Every week I meet someone I dislike.
4. I know that people are talking about me behind my back.
5. When something makes me angry, I put it out of my mind and think of something else.
6. Some people would say that I am a hothead.
7. My muscles feel tight and wound-up.
8. When I get angry, I stay angry for hours.
9. I walk around in a bad mood.
10. If I feel myself getting angry, I can calm myself down.
11. My temper is quick and hot.
12. When someone yells at me, I yell back at them.
13. I have had to be rough with people who bothered me.
14. I feel like smashing things.
15. When I am frustrated by a problem, I try to find a solution.

(1) Never True (2) Sometimes True (3) Always True

16. I get angry because I have good reason to be angry.
17. I can't sleep when something wrong has been done to me.
18. If I don't like someone, it doesn't bother me to hurt their feelings.
19. People can be trusted to do what they say.
20. I try to see positive things in other people.
21. When I get angry, I get really angry.
22. When I think about something that makes me angry, I get even more angry.
23. I feel agitated and unable to relax.
24. I get annoyed when someone interrupts me.
25. I am able to stay cool in the face of pressure.
26. If someone bothers me, I react first and think later.
27. If I don't like somebody, I'll tell them off.
28. When I get mad, I can easily hit someone.
29. When I get angry, I throw or slam things.
30. When I have a conflict with someone, I speak to that person about the problem.
31. If I lose my temper with someone, it's because they deserved it.
32. When someone makes me angry, I think about getting even.
33. If someone cheats me, I'd make them feel sorry.
34. People act like they are being honest when they really have something to hide
35. If someone says something nasty, I can swallow my pride & let it go.
36. When I get angry, I feel like smashing things.
37. Some people get angry and get over it, but for me it takes a long time.

(1) Never True

(2) Sometimes True

(3) Always True

38. I have trouble sleeping or falling asleep.

39. A lot of little things bug me.

40. When I get agitated, I can relax by taking deep breaths.

41. I have a fiery temper that arises in an instant.

42. Some people need to be told to “get lost.”

43. If someone hits me first, I hit them back.

44. When I get angry at someone, I take it out on whomever is around.

45. If I disagree with someone, I try to say something constructive.

46. The more someone bothers me, the more I’ll get angry.

47. I feel like I am getting a raw deal out of life.

48. When I don’t like somebody, there’s no point in being nice to them.

49. When someone does something nice for me, I wonder about the hidden reason.

50. If someone is bothering me, I try to understand why.

51. It makes my blood boil to have someone make fun of me.

52. When I get mad at someone, I give them the silent treatment.

53. My head aches when people annoy me.

54. It bothers me when someone does things the wrong way.

55. I can get rid of tension by imagining something calm and relaxing.

56. When I get angry, I fly off the handle before I know it.

57. When I start to argue with someone, I don’t stop until they do.

58. Some people need to get knocked around.

59. If someone makes me angry, I’ll tell other people about them.

60. I can walk away from an argument.

Appendix G

Recruitment Flyer

An Exploration of Attachment, Trauma, and Treatment Outcome in a Cognitive Behavioral Therapy-Based Group Anger Management Program: A Multiple Case Study

ST. MARY'S UNIVERSITY



A Research Study Approved by St. Mary's University

Accepting Volunteers who:

- Are 18 years of age or older, and required to attend an anger management program, and
- It has not been longer than one week since your first group session of the program.

Research Objectives:

The ability to handle emotions such as anger is believed to be developed early in one's life. There appear to be many factors involved in the development of poor anger regulation, and some may be linked to negative past experiences. The goal of the research study is to explore how important relationships and trauma may be related to the development of poor anger regulation, and the changes that occur for individuals who have completed a group anger management program.

Participation:

- Volunteers will be interviewed by the researcher within one week of starting the program and when they have completed the program. During the interviews, the volunteers will also complete paper and pencil questionnaires. The first interview process is estimated to take approximately 90 minutes, and the second interview process will take about 45 minutes. The interviews will take place at the Second Chance Consulting office on N. Shepherd Dr., Houston, Texas.
- If you are interested in volunteering, please contact **Cynthia Swope, LMFT** at **832-491-8737** (tear off slips below with telephone number). Ms. Swope is a doctoral student in the Marriage and Family Therapy Program at St. Mary's University.

Appendix H
Consent for Participation in a Research Study
St. Mary's University

Title: An Exploration of Trauma, Attachment, and Treatment Outcome in a Group Cognitive Behavioral-Based Anger Management Program: A Multiple Case Study

Principal Investigator: Cynthia K. Swope, M.A., Department of Counseling and Human Services.

Faculty Sponsor: Dr. Carolyn Tubbs, Ph.D., Director, Marriage and Family Therapy Program, Department of Counseling and Human Services, 210-438-6418.

I am volunteering to participate in the above referenced research study. I understand that my participation in this study is entirely voluntary, and I may refuse to participate, or I may decide to cease participation once begun. Should I withdraw from the study, which I may do at any time, or should I refuse to participate in the study, my decision will involve no penalty or loss of benefits to which I am otherwise entitled. Additionally, I understand that my participation or withdraw will in no way impact my standing in my current anger management classes, the anger management program, or my relationship with community supervision officers. I am being asked to read the consent form carefully and will be given a copy of it to keep, if I decide to participate in the study.

I was told that the research study is designed to explore the connection between important relationships, trauma, and treatment outcome among individuals required to attend anger management. I was informed about the following research procedures:

- Within one week from my first anger management class, I will be interviewed for about 90 minutes.
- I will be asked questions about the offense for which I am required to attend anger management. I will be answering questions only about that offense.
- I will be asked questions about experiences of anger as a child in my family and how that has affected me as an adult.
- I will repeat a similar interview in the last week of my anger management program. It will take about 45 minutes.
- My interviews will be audio recorded and the audio recording will be confidential. It will also be destroyed immediately after the researcher has typed it up.
- I understand that the interviews will take place in the private offices of my anger management program.

Also, I will complete three pen and paper assessments related to the offense for which I was required to attend anger management, my experience of anger in my family as a child and how it affects me as an adult, and my current experience of relationships. I will fill out the three (3) assessments the first time I meet the researcher after I sign up for the study. I will fill out only one (1) assessment when I meet the researcher in the last week of my anger management program to complete the second interview.

I have been advised that while there are no physical risks associated with participation in this project, I may experience some emotional discomfort when I share my personal experiences and opinions. I have been informed that if uncomfortable emotions occur and continue, I will be given the name of someone in the agency providing the anger management program for further assistance.

I have been advised that I will receive no direct benefit from my participation in this study, but my participation will help the researcher better understand how anger occurs and works, and will provide important information on how to help individuals struggling with anger management and control. I have been advised that the data collected from the study will be used for educational and publication purposes; however, I will not be identified by name. My confidentiality and the data will be maintained within allowable legal limits.

I understand that special efforts to protect my identity will be made. Specifically, I will provide a made-up name to be used throughout the study. The researcher will address me by this made-up name only. To further protect my identity, made-up names will be transformed into identification numbers when I complete the second interview, which will also be the end of data collection for me.

LIMITS TO MY CONFIDENTIALITY

I have been told that the researcher is a licensed marriage and family therapist who is legally required to report child, vulnerable person or elder abuse to the proper authorities. If during the interviews a respondent implicates themselves, a family member or acquaintance with a suspicion that a child, elder or disabled person has been abused, the researcher will be obliged to report this to law enforcement. The research questions will attempt to avoid questions that will draw out information that will trigger a report of abuse to law enforcement. I understand that because of these professional guidelines, the researcher will report any situation that I discuss during the interview that reveals child, vulnerable person or elder abuse, as well as any situation I discuss that causes her to suspect child, vulnerable person or elder abuse.

LIMITS TO MY VOLUNTARY WITHDRAW OF PARTICIPATION

I understand that because these special efforts will be made to protect my identity, they will also limit the time period when I can voluntarily decide to withdraw I can quit the study and have my information deleted from the study. I understand that the researcher will have no way of identifying which information belongs to me after she transforms the made-up names to identification numbers at the end of the second interview. Because of this, I understand the final date I can voluntary quit the study will be the same date that I complete my second interview with the researcher.

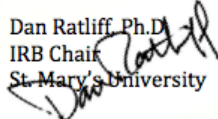
I understand that no money or gifts will be offered for my participation in this study. I have been told that the investigator has the right to remove my information from this study at any time. The researcher has offered to answer all my questions.

My signature below acknowledges my voluntary participation in this research project. Even though I am agreeing to participate, it does not release the researcher, institutional sponsor, or granting agency from their professional and ethical responsibility to me.

The IRB has approved the study, Swope, C. [C. Tubbs, Faculty Sponsor]. An Exploration Of Trauma, Attachment And Treatment Outcome In A Cognitive Behavioral Therapy-Based Group Anger Management Program: A Multiple Case Study for the period of 8/15/2014 to 8/14/2015.

If you have any questions about your rights as a research subject or concerns about this research study, please contact the Chair, Institutional Review Board, St. Mary's University at 210-436-3736, or email at IRBCommitteeChair@stmarytx.edu.

Dan Ratliff, Ph.D.
IRB Chair
St. Mary's University



I HAVE READ THE INFORMATION PROVIDED ABOVE AND HAD MY QUESTIONS ANSWERED TO MY SATISFACTION. I VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY. AFTER IT IS SIGNED, I WILL RECEIVE A COPY OF THIS CONSENT FORM.

Name (Please print)

Signature of research participant

Name of witness

Signature of witness

Signature of Principal Investigator

If you have any questions about your rights as a research subject or concerns about this research study, please contact the Chair, Institutional Review Board, St. Mary's University at 210-436-3736, or email at IRBCommitteeChair@stmarytx.edu.

Researcher Use Only

Informed consent is a process that provides sufficient opportunities for the participant to freely consider whether or not to participate. Please note that you verbally discussed the following aspects of informed consent and the participant demonstrated understanding:

Disclosing offenses

You will be withdrawn from the study if you disclose an offense that has not been reported.

Suspicion of abuse

If you disclose any information that creates a suspicion that implicates you, a family member, or an acquaintance that a child, elderly person or disabled person has been abused, the researcher is legally mandated to report that suspicion to law enforcement.

The researcher will attempt to avoid questions that will draw out information that may trigger the legal mandate to report a suspicion of abuse of a child, elderly person, or disabled person.

Confidentiality protection

The researcher will attempt to keep your responses confidential by letting you select a pseudonym that the researcher will use throughout the survey and interviews. Participants are asked not to use names of family members of acquaintance during the interviews. After the second interview the researcher will transform the pseudonyms to a unique identifying number and will not be able to identify any participant.

Voluntary withdrawal

You can voluntarily withdraw from the study at any time before the completion of the second interview. After the second interview, the data will be de-identified so that the researcher will not know which information belongs to you.

Appendix I
Release of Confidential Information Form

I _____ (print client name),
DOB: _____, authorize **Spring Counseling Center, 16300
Kuykendahl Rd., Ste. 110, Houston, TX 77068**, to release to **Cynthia K. Swope, M.A.**
(principle investigator) the following specified information:

_____ My scores on the Substance Abuse Subtle Screening Instrument (SASSI-3)
and my scores on the Beck Depression Inventory (BDI-II).

_____ Probation Department conditions of probation and classification of offense

This information will be used for the purpose of:

_____ **Screening for eligibility to participate in the research study titled,**
*An Exploration of Trauma, Attachment, and Treatment Outcome in a Group Cognitive
Behavioral-Based Anger Management Program: A Multiple Case Study.* **Principal
Investigator:** Cynthia K. Swope, M.A., Department of Counseling and Human Services.
Faculty Sponsor: Dr. Carolyn Tubbs, Ph.D., Director, Marriage and Family Therapy
Program, Department of Counseling and Human Services, St. Mary's University, San
Antonio, TX., 210-438-6418.

This authorization will expire one year from the date of signature below. I
understand that I can revoke this authorization at any time by writing to Spring
Counseling Center but that revoking this authorization will not affect disclosures made or
actions taken before the revocation is received. I am entitled to receive a copy of this
authorization. A copy of this authorization may be utilized with the same effectiveness as
an original.

_____ Date: _____

Client signature

ST. MARY'S UNIVERSITY



August 14, 2014

Cynthia Swope
Dept. of Counseling
St. Mary's University

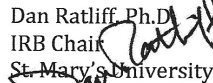
DELIVERED BY EMAIL TRANSMISSION

Dear Ms. Swope:

The IRB has approved the study, Swope, C. [C. Tubbs, Faculty Sponsor]. An Exploration Of Trauma, Attachment And Treatment Outcome In A Cognitive Behavioral Therapy-Based Group Anger Management Program: A Multiple Case Study for the period of 8/15/2014 to 8/14/2015.

If you have any questions about your rights as a research subject or concerns about this research study, please contact the Chair, Institutional Review Board, St. Mary's University at 210-436-3736, or email at IRBCommitteeChair@stmarytx.edu.

Dan Ratliff, Ph.D.
IRB Chair
St. Mary's University



Thank you for such careful attention to the revisions that maintain the higher standards of working with a vulnerable population. The IRB members have reviewed the proposal and determined that the revisions address all the concerns, except two, that were raised in the Conditional Acceptance of May 16, 2014.

I have taken the liberty to modify your Informed Consent document to address the two concerns that remained outstanding in your latest revision. Both concerns are related to Informed Consent, as noted in the reviewer comments:

If during the interview(s) a respondent implicates a family member or acquaintance with an unreported crime, this also must be reported to law enforcement. The respondent should be made aware of this in the Informed Consent document.

The length of the Consent document may prompt participants to sign without knowing the risks they are entering into. IRB Policy states "Informed consent is a process... that provides sufficient opportunities for the participant to freely consider whether or not to participate." Can the researcher verbally



verify the participants' understanding on critical information related to risk of disclosure and confidentiality protection?

To expedite the approval, I have taken the liberty to modify your Informed Consent document (attached) to address these two concerns.

Two sentences in the section, "LIMITS TO MY CONFIDENTIALITY"

Section at the end to give evidence of participant understanding of key provisions of risk of disclosure, confidentiality procedures, and voluntary withdrawal.

This allows the IRB to give you full approval at this time. However, if you wish to resolve these two concerns in a different manner in the Informed Consent process, you can certainly do that before you begin any data collection. If you choose to modify the Informed Consent document or procedures, just email me the final version and I will re-issue an approval letter.

IRB REVIEW DETERMINATIONS: Additional Protections Pertaining to Biomedical and Behavioral Research Involving Prisoners as Subjects [45 CFR 46 SUBPART C]

After review by the Prisoner Representative to the St. Mary's IRB in the meeting convened May 5, 2014, the IRB in full review determined **CONDITIONAL APPROVAL** based on specific determinations as required by 45 CFR 46 SubPart C.

After receiving modifications to the research and review by the Prisoner Representative to the St. Mary's IRB, the IRB has made all of the determinations necessary for approval.



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To expedite the approval, I have taken the liberty to modify your Informed Consent document (attached) to address these two concerns.

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Section at the end to give evidence of participant understanding of key provisions of risk of disclosure, confidentiality procedures, and voluntary withdrawal.

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After receiving modifications to the research and review by the Prisoner Representative to the St. Mary's IRB, the IRB has made all of the determinations necessary for approval.

ST. MARY'S UNIVERSITY



As before, if you have any questions, feel free to contact me, Dr. Harper or Dr. Getz. If, at any time, you make changes to the research protocols that affect human participants, you must file a "Changes to Approved IRB Protocol and/or Unanticipated Problems" form. Changes must be reviewed and approved by IRB before proceeding with data collection.

Congratulations on completing this step of your research. Your persistence in pursuing your research goals is exceptional. You have successfully balanced the sound research methods with the heightened concerns for a vulnerable population. I look forward to seeing the results, which, I am confident, will add to the knowledge related to treatment of offenders.

A handwritten signature in black ink that reads "Dan Ratliff".

Dan Ratliff, Ph.D.
IRB Chair

CC: Carolyn Tubbs, PhD, Faculty Sponsor
Ray Wooten, Ph.D. Department Chair
Melanie Harper, Ph.D. IRB Area Representative
Andrew Getz, IRB member

Attachment: Revised Swope Consent for Participation.docx
IRB Approval Stamp jpeg file

October 1, 2014

St. Mary's University
INSTITUTIONAL REVIEW BOARD
One Camino Santa Maria
San Antonio, TX 78228

To whom it may concern,

I, Armando Lopez, Program Director at Spring Counseling Center, a for-profit agency located in Houston, Texas, am writing to confirm my support for Cynthia K. Swope, M.A., LMFT, in her research project.

I have agreed to allow Ms. Swope to post her research recruitment flyer at the Spring Counseling Center office. I have also agreed to allow Ms. Swope to utilize our offices to conduct scheduled interviews at the convenience of the client. I understand the proposed research is an exploration of the relationships between trauma, attachment, and treatment outcome in a Cognitive Behavioral Therapy-based group anger management program. I understand that participation in the proposed research will be on a voluntary basis, and will in no way impact the client's standing in the program, or relationship with their community supervision officers.

I understand that the information gathered from participants will be handled in a manner that protects the privacy and confidentiality of the client. I have been advised that the data collected from the study will be used for educational and publication purposes; however, the participants will not be identified by name. I confirm that I have no involvement in the proposed research project.

Sincerely,



Armando Lopez, LCDC
Program Director
Spring Counseling Center
16300 Kuykendahl Rd., Ste. 110
Houston, TX 77068
281-893-1190

VITA

- CENSUS:** Cynthia K. Swope, LMFT, Kingwood Counseling & Neurofeedback Institute, 562 Kingwood Dr., Ste. 11, Kingwood, TX, 77339.
- EDUCATION:** *St. Mary's University, San Antonio, TX*
In Process – Ph.D. in Marriage and Family Therapy
- 2016**
University of Houston – Clear Lake, Houston, TX
M.A. in Behavioral Science – Family Therapy
- 2006**
Internship: The University of Texas Medical Branch at Galveston
University of Houston, Houston, TX
B.S. in Psychology, Minor in Sociology
- 2001**
Summa Cum Laude
- EXPERIENCE:** **2013 – Present** – Owner/Director – *Kingwood Counseling & Neurofeedback Institute, Kingwood, TX* - Clinical assessment, treatment planning, traditional therapy services, Neurofeedback & EMDR Therapy
- 2009 – 2012** - *Private Practice, San Antonio, TX*
Clinical assessment, treatment planning, and therapy services including Neurofeedback & EMDR Therapy
- 2010 – 2011** - Instructor and Therapist – *South Texas Offender Programs, San Antonio, TX*
Instructor for Sex Offender Program and Anger Management Program; responsible for clinical assessments and reporting, including Federal Evaluations and reports; individual and couple therapy for court-mandated clients; new client intake/assessment
- 2008 – 2009** - *Zeitgeist Wellness Group, San Antonio, TX*
Provided counseling services for Employee Assistance Program referrals, Military personnel, and clients with chronic illness; Critical Incident Responder; provided Neurofeedback Therapy; supervised visitations; marketing/networking; responsible for clinical assessment and reports
- 2006 – 2009** - Individual, Couple, & Family Therapy – *St. Mary's Family Life Center, San Antonio, TX*

Clinical assessment, treatment planning, and therapy services including Neurofeedback Therapy

2007 - Psychological assessments – *Turning Points Surgical Center, San Antonio, TX*

Provided psychological assessments for pre-bariatric surgical candidates to determine readiness for the challenges precipitated by the surgical procedure and lifestyle changes

2005 – 2006 - Medical Family Therapy – *UTMB, Department of Family Medicine, Galveston, TX*

Clinical Internship providing individual, couples, and family therapy; planning and presentation of physician workshops on sexual dysfunction and ADD/ADHD; collaborated with physicians during clinical assessment and treatment planning for patient issues impeding healthy functioning in physical and psychological domains

2003 – 2005 - *Psychological Services, University of Houston – Clear Lake*

Clinical assessment, treatment planning, and therapy services under supervision of George Pulliam M.S.W., co-founder of the Houston Galveston Institute

PRESENTATIONS: Swope, C., *Neurofeedback Therapy for Mood Disorders*, presented at the Depression and Bipolar Support Alliance, San Antonio, TX, Feb. 2010

Swope, C., & Parsons, J., *Brain Wave Rhythms & Regulation: An Introduction to Neurofeedback Therapy*,

CEU workshop presented at Laurel Ridge Treatment Center, San Antonio, TX, Oct. 2009

Swope, C., & Parsons, J., *Brain Wave Rhythms & Regulation: An Introduction to Neurofeedback Therapy*,

CEU workshop presented at NIX Behavioral Health, San Antonio, TX, Jan. 2009

Bell, L., Meyer, J., Rehal, D., Swope, C., Martin, D., & Lakhani, A. (2007). Connection and individuation as separate and independent processes: A qualitative analysis. *Journal of Family Psychotherapy, 18*, 43-59.

CERTIFICATIONS: *Neurofeedback Therapy*
Certified Clinical Trauma Professional
Eye Movement Desensitization and Reprocessing (EMDR)
Texas Department of State Health Services - DWI, DWII, TDOEP & ASOTP Instructor & Program Director